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Number 2



W.K.F.

COOPER ORNITHOLOGICAL CLUB

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THE DUSKY WARBLER

From a Water-color Painting by Allan Brooks

(REDUCED IMAGE OF PLATE TO APPEAR IN "THE BIRDS OF CALIFORNIA")



THE CONDOR A MAGAZINE OF WESTERN ORNITHOLOGY.



Volume XV

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THE NESTING OF THE PRAIRIE FALCON IN SAN LUIS OBISPO COUNTY

By WILLIAM LEON DAWSON

WITH FIVE PHOTOS BY THE AUTHOR AND ONE DRAWING BY ALLAN BROOKS

THE 'problem of evil' has always bothered the theologian, and he is bound to wrestle with it, because inconsistency is intolerable in religious thinking. But the bird-lover cannot be consistent. Within his little province he cannot "love good and hate evil", for to do so were to lose that *joy in variety* which is his endless delight. Nature herself is inconsistent—fearfully so. Indeed, it is she who has set theology's problem. And if there be a "higher unity" or "religious synthesis" (and I believe there is) we as nature students have naught to do with it. If we are to find satisfaction in things as they are, if we are to enjoy nature, external nature, we must surrender ourselves to admiration of beak and talon no less than of wing and song. We may champion the cause of our specialty—Birds against the world, if you like, and death to cat, weasel, and serpent—but you cannot adjudicate as between magpie and chick, hawk and sparrow, raptor and raptee. Or if you do, you will only make yourself miserable, and wherefore?

All of which is artful preface to a declaration of love for that arch scamp and winged terror, the Prairie Falcon (*Falco mexicanus*). Ruthless he is, and cruel as death; but ah, isn't he superb! To recall his image is to obtain release from imprisoning walls, glad exit from formal gardens and the chirping of sparrows. To recall his scream is to set foot on the instant upon the bastion of some fortress of the wilderness. Away with your orange-bowered bungalows! Give me a sun-burned battlement in the hills of San Luis Obispo County. A plague on your dickey birds! Let me dare the displeasure of the noble falcon as he falls like a bolt from the avenging blue and shrieks out his awful rage.



Fig. 9. REGARDANT

Redrawn by Allan Brooks after photo by W. L. Dawson

Curse for curse and blow for blow, you jolly old pirate! Hide your treasures in the remotest cranny of the uttermost wilderness, if you will, and I shall find them; and if I find them, they are mine; and if I reach them, you may wreak your vengeance on whom you will. I will not even reproach you for the rape of pullets nor the carnage of quails. Go to it, old sport! Fill the air with shrieks and call heaven to witness what a rogue you are! Aye, but you're a gay fowl, and I'm o'er fond of you!

The first requirement of the Prairie Falcon is open country; and the second a cranny where she may lay her young. These conditions are ideally met in a low range of hills which run north and south through eastern San Luis Obispo County, and form the back-bone of that "cattle country" made famous in story and song by deeds of vaquero and misdeeds of brigand. To the westward lie other rolling hills carpeted with bunch grass and dotted with oaks. To the eastward stretches the arid interior plain. This cardinal ridge, by reason of the



Fig. 10. A NESTING HAUNT OF THE PRAIRIE FALCON

torrential character of the occasional rains of that country, is deeply scored by lateral canyons, and "breaks" in a thousand walls, walls which vary in appearance from the sloping adobe of the north to the rugged escarpments of sandstone, conglomerate, and Pecten beds, which front the upper San Juan. Here are the castles, and there are the banquetting tables. For the presence of cattle means insects, and insects imply insect-eating birds, and *Insectivores* mean *Raptors*. If we use birds-of-prey in the economic instead of the structural sense, and so include Magpie, Raven, and Shrike, then this cattle country is ravaged by no less than 23 species of feathered bandits (and ghouls); and of these we actually saw nineteen in the course of a three weeks' reconnaissance last April.

Of *Falcones* proper, after the ubiquitous Kestrel (why "Sparrowhawk"?), the Prairie Falcon is most numerous in fact and least evident to casual notice. It is his proper domain, but he rules it invisibly, from on high. His business with

earth is quickly despatched, and he is off again, while the slow eye, especially of the breeder of hens, settles upon the soaring *Buteo* as the presumptive culprit. While his visits to the poultry yard are by no means rare, and his offenses, judged from this narrow human angle, are serious, we shall not stop to plead the thousands of destructive squirrels which this bird accounts for, but only hasten on to view him, or rather her, at home.

The first scene is a wild adobe amphitheater, the most distant in the "general view" herewith presented. A few shrubs manage to cling to the upper reaches of the great earthen funnel; but as the walls descend the pitch increases,



Fig. 11. CAUGHT AT HOME: FEMALE PRAIRIE FALCON
AT MOUTH OF NESTING CRANNY

until the vortex, 400 feet below, is fronted by walls perpendicular, or even undercut. Here at a point midway of the basal wall, Truesdale's practiced eye discerned a Prairie Falcon squatting upon a shady shelf. I stood on the very uppermost brim of the funnel whose edges fell away sharply on either hand, and from my station it did not seem that a bird could find footing, let alone lodgment, on the wall against which this Falcon had set herself. Yet a determined facing of the problem of approach brought a sure solution. We set an iron peg down some forty feet over the brim, then made fast and cast off the 60-foot rope with which we were provided, and found that it thus exceeded the nest by fifteen feet. To have

gone down from above would have meant some risk, as well as an accompaniment of blinding dust, so "Kelly" made a detour and attacked from below. By dint of carving steps with a hammer he succeeded at last in clutching the dangling rope-end, and so reached the coveted shelf. The Falcon meanwhile made the great amphitheater resound with malediction, and charged about in a fashion to make the beholder dizzy as he watched her passage across the fluted background. Her anger made our visit memorable, but it failed to arouse her mate, who was doubtless off hunting in the basin country.

Though slow to take alarm, the Falcon once roused from the nest becomes very wary. It was doubly fortunate, therefore, that the bird photographed in one accompanying picture could be approached under cover, and suddenly confronted from a convenient spur just opposite. To reach this nest our intrepid guide, Dean Brown, went down hand over hand the full length of a 140-foot

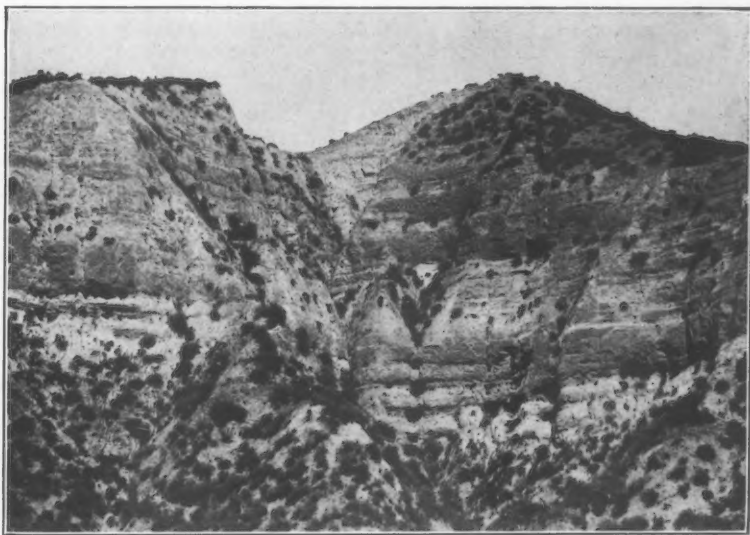


Fig. 12. A TYPICAL NESTING CLIFF. X INDICATES POSITION OF CLIMBER

rope. A bird who knows she is under surveillance will never resume a position on the eggs; but she will intersperse her nervous and often distant excursions by prolonged rests on some favorite perch or commanding knob. And this she is the more ready to do if the observer himself remains quiet. A resumption of hostilities sends her off on the instant to scream and soar or tower and stoop.

In about half the cases noted the male bird, who was in no instance the siter, responded to the summons of his mate and joined in the outcry. He was quite as loud, but not quite so persistent in denunciation as the female; and I could not detect any difference in the notes as between the sexes, such as exists in the case of the American Peregrine (*Falco peregrinus anatum*).

The assaults of an angry Falcon are really dangerous. Even when the earliest efforts are discouraged by a show of stick or stones, it is decidedly disconcerting to feel the rush of air from a passing falcon-wing upon your hatless

pate, or to mark the instant change in pitch from the shrill uproar of impending doom to the guttural notes of baffled retreat. The Falcon has a nasty temper at best, and if she dare not vent her spite on you, she will fall upon the first wight who crosses her path. Woe betide the luckless Barn Owl who flaps forth from his polluted den hard by to learn the cause of the disturbance. I have seen such bowled into the sage in a trice, and Kelly declares that he has several times seen them struck dead. At such times also the Raven is put on trial for his life. In spite of their close association, there is evidently an ancient grudge between these birds. Whether or no the ebony saint be at fault, I cannot tell, but certain it is that if a Raven blunders near in the hour of the Falcon's high displeasure, he is fearfully beset. The Raven is an adept at wing-play himself, and the Falcon's thunderbolt is met with a deft evasion which reminds one of the best sword-play.

But the Raven takes no pleasure in it. His eyes start with terror, and while he has no time for utterance himself, the distressed cries of his mate proclaim the danger he is in.

This close association of Falcon and Raven at nesting time is the strangest element in the lives of both of them. To be sure their requirements of nesting sites are similar; but it is more than that which induces the birds to nest within a hundred yards of each other in the same canyon, when neighboring or distant canyons offering as excellent sites are empty. So constant indeed is this association that when one finds the Raven's nest, he says, "Well, now, where is the Falcon's?" Of the entire number of Raven's nests which came under my personal notice this year, seven were thus associated with the Falcon's in the same canyon, and the remaining three were within a quarter of a mile of Falcon's in neighboring canyons separated by a single ridge. And it is impossible to tell



Fig. 13. PIRATE OF THE CLOUDS

from the stage of incubation reached which bird is the follower. In two instances, nests containing young Ravens were associated with Falcons whose eggs had not yet hatched; but in another notably close instance, the Raven laid her first egg on the day the Falcon's eggs were pipped. The remaining instances were neutral; i. e., nests of both species contained eggs. The only guess we dare hazard is that both birds reap advantages of warning in case of hostile approach.

Concurrent with this association is the annual, or at least occasional, shifting of sites on the part of both species. This shifting is of course quickened by persecution. If unsuccessful in raising a brood one year the bird will try another situation, but always, except in extreme instances, in the same canyon or general locality. In this way the Falcon appropriates the site once occupied by Ra-

vens (and so gets credited with a "stick" nest, though I am satisfied that the Falcon never lifts a twig); and the Ravens, in turn, without opposition, are allowed to rear their pile in a niche just previously occupied by the Falcons. The ruses adopted by birds hard pressed are sometimes humorously pathetic. A Falcon which last year occupied the front of a noble escarpment in a wild valley (and forfeited four clouded beauties thereby), was found this year after a lengthy search, in a tiny niche once occupied by a Road-runner, on the back, or hill-facing side, of a minor sandstone tooth, and not over twenty feet from the ground. The retreat had been betrayed by an incautious line of white excrement, and the occupant, when summoned by a shout from the triumphant Kelly, looked



Fig. 14. AN EASY DESCENT; NEST IN CRANNY A LITTLE ABOVE CLIMBER

the very picture of disgust and chagrin. She was mad all through, too disgusted for utterance, and she sat glooming upon the edge of the nest until we drew very near. When she flew she gave vent to the usual number of futile expletives, whereupon the male joined her and gave us a double blessing.

Choice of sites varies from "potholes" and crannies to more pretentious caves or even open ledges. A south exposure is oftenest favored and there seems to be no particular effort on the part of the sitting bird to avoid the glare of the sun. Unseasonable rains, however, do sometimes cause her discomfort, and more rarely, loss.

The first two weeks in April are the golden weeks for Falcon nesting in the cattle country. Evidently many sets are complete by April first, for we found

one far advanced in incubation on the 19th, and another hatching on the 22nd. If robbed early in the season, second sets are almost invariably laid in a new but closely related situation.

Probably none but the few elect would enjoy a rhapsody on color variation in Falcons' eggs, and the non-elect would raise holy hands of horror over the thwarted hopes of these feathered brigands. So be it then, and suffice to say that neither Brooks nor Fuertes can paint a bird with such bewitching grace as Nature herself displays in the lawless tinting of a Falcon's egg. She (*varium et mutabile semper femina*) dips her brush in oorhodeine and she feathers and stipples or twirls and scumbles, or as suddenly ceases, until the hearts of her poor votaries are seized with an exquisite pain—but those dear woes we may not voice.

WILLIAM LEON DAWSON—A BIOGRAPHY

By HARRY S. SWARTH

WITH PORTRAIT AND TWO PHOTOS

IT IS always of interest to follow the growth of a large and important enterprise, to trace, step by step, the first early attempts by which momentous results are eventually reached, and to study the personality of the man or men behind the undertaking, the backbone of the adventure. The Cooper Ornithological Club has in recent years widened the scope of its activities to an extent probably undreamed of by its founders, being now committed to the active support of several undertakings of unusual interest and moment; and the individuals most directly concerned in each of these different enterprises have naturally become objects of particular interest to their fellow club members.

Among the projects which the Club has pledged itself to support there is probably none of greater general interest than the proposed publication, "The Birds of California," undertaken by William Leon Dawson, and now being so energetically pushed towards completion. Those of us most closely in touch with Mr. Dawson—who have had opportunities of observing the growth and development of the undertaking—have felt that others would be interested to know something of the circumstances leading up to so desirable a consummation as the production of the work as planned, as well as something of the ideas and ideals with which the author approaches his task. In this brief sketch the main incidents of his career are outlined, and an attempt is made to interpret some of his aspirations as to what the forthcoming book should be.

William Leon Dawson, an only child, was born at Leon, Decatur County, Iowa, February 20, 1873. The family soon after removed to western Kansas, where the father, William E. Dawson, a lawyer, helped to organize the county of Rush, becoming its first prosecuting attorney, and later its first superintendent of public instruction. A little later the father entered the ministry, and the family removed, first, in 1879, to Ottawa, Kansas, two years later to northern Illinois. When the son was twelve years of age they moved to Ahtanum, Yakima County, Washington; and when he was fourteen to Seattle, where he entered the State University, at that time little more than a high school.

The boy had already a fondness for natural history, an attribute not so uncommon in youth, but which too frequently dies out through lack of encourage-



Fig. 15. WILLIAM LEON DAWSON
Photo by W. Edwin Gledhill

ment and guidance. In this instance the son received from his father, although himself not a naturalist, inspiration for a passionate and lasting love for the out-of-doors and for all that it includes. The religious influence of the mother developed in the child a hopeful courage and exuberant cheerfulness, conducive to ambitious effort, regardless of obstacles. The love for the open in general soon had a more definite objective in a collection of birds' eggs, started in emulation of a young friend. "It was in northern Illinois in 1883 that I flushed a Prairie Hen from a nest of fifteen eggs. 'Roy Sears collects birds' eggs; why not I? Just one'. (And the memory of those fourteen wasted eggs has haunted me ever since!)" Among still more youthful recollections he speaks of several incidents connected with bird life, which stand out in vivid remembrance—at four of being lifted up to see the eggs in a Brown Thrasher's nest; at five of being lowered over a sandbank on a rope, to investigate Bank Swallows' nests; and of his excitement the next fall at the sight of a migrating host of hawks, which filled the nearby trees at nightfall.

The accumulation of eggs soon led to a desire to learn more of the birds themselves. Wood's "Natural History" and a "Library of Universal Knowledge" did but poorly appease this hunger for knowledge, although the scanty information relating to American birds contained in these books was eagerly gleaned from the mass of other matter. Not until he was eighteen did the young student acquire a real bird book, Coues' "Key" (fourth edition), the possession of which marked the beginning of a new era in his development. At sixteen he had begun systematically to keep written record of his ornithological observations. This journal he has continued uninterruptedly ever since its inception, and this careful elaboration of observations has done much toward ensuring accuracy, as well as variety and exactness of expression; while perhaps the greatest value to the mature student is the record of the changing view points of the growing youth.

It was while a student at the University of Washington, working under Professor O. B. Johnson, himself somewhat interested in ornithology, that Dawson first conceived the hope of perhaps some day writing a work upon the birds of the state. A little later, as a freshman at Oberlin College, he came in contact with an older student, Lynds Jones, and it was to Jones that he owed, as he puts it, "the unstopping of the ears".

"It is marvellous in retrospect", he says, "to think how dependent I was upon a single faculty, that of vision, in endeavoring to learn the life of the birds. It was as though I had no ears until Jones pointed out the beauty and variety of bird music. Now I take as much pride in recognizing a bird by its faintest chirp or twitter as by its color-pattern or fashion of flight. Indeed, in the appreciation of birds I should sooner sacrifice eyesight than hearing."

The friendship between Dawson and Jones was lasting, and the two men did much work together. A paper entitled "A Summer Reconnaissance in the West" appeared in the *Wilson Bulletin* (no. 33, 1900) giving "horizons" of the birds seen on an extensive western trip undertaken by the two companions.

Although from his earliest years so deeply interested in birds, Dawson had only the ministry in mind as his life's work, and in pursuance of this career he entered the theological seminary at Oberlin in 1894, instead of completing his college course. On May 1, 1895, he was married to Miss Etta Ackerman, also a student at Oberlin, and the following year was spent as a home missionary and Sunday school worker in Okanogan County, Washington, a parish then larger than the state of New Jersey! In this exceedingly attractive ornithological field

the birds secured somewhat more than their due share of attention, and various short papers were published as some of the results of the year's observations. Probably the most important of these was "A Preliminary List of the Birds of Okanogan County, Washington", recording 145 species, which appeared in *The Auk* for April, 1897.

His constantly augmenting interest in ornithology bred a desire to abandon the ministry for science, and Dawson returned to Oberlin once more to take his senior year in college, securing a position in the college museum. The dissection of cats in a college laboratory, however, proved much less interesting than the study of birds in a virgin field such as he had just left, and the evangelical interest gained strength once more; so that the following year found him enrolled as middler in the theological seminary. He graduated from the institution with highest honors, gaining the greatest financial prize awarded for the year.



Fig. 16. THE STUDIO, LOS COLIBRIS

Following his graduation Dawson returned to Washington, but after a year in Yakima County, in charge of a moribund country church and an equally discouraging country academy, he accepted a call to a vigorous city church in Columbus, Ohio. Here the burden of clearing a big church debt developed an unsuspected talent for "raising money", a most useful faculty in the work to come in later years. The labor involved in this added obligation, however, together with the somewhat uncongenial exactions of a large city parish, caused a physical breakdown which finally decided Mr. Dawson to definitely abandon the ministry, and devote himself entirely to ornithology.

Prominent among his parishioners, and a close personal friend, was an experienced book-man, and the two together planned the publication of "The Birds of Ohio". This was published in the winter of 1903-04, and the work itself met with instant approval, an edition of 5,000 copies being quickly sold out. But the

affairs of the publishing company were mis-managed, and Mr. Dawson withdrew, determined to profit by the mistakes of this first venture, and to become himself responsible for the financial management as well as for the literary and scientific sides of any similar undertaking in the future.

He returned to the state of Washington, where, in the spring of 1905, he organized the Occidental Publishing Company, and began work on his "Birds of Washington". These were boom days in the northwest, and it speaks volumes for the character of the man that he should have persistently disregarded the financial allurements constantly offered in a community gone real-estate-mad, to continue steadfastly in the pursuit of his object. Four years of unremitting and arduous labor finally resulted in 1909 in the complete success of what at first had seemed but the dream of a visionary, the production of one of the most beautiful sets of books in modern ornithological literature.

The high appreciation of his efforts expressed by certain members of the Cooper Club contained perhaps the first suggestion of the desirability of attempting a similar work in California. This course of action was decided upon only after a year's deliberation, but the field afforded such unrivaled opportunities, and the encouragement and support proffered were so reassuring that there was no resisting the temptation.

In the selection of a dwelling place the charms of Santa Barbara prevailed over the rest of the state, and here, on the outskirts of the city, a comfortable home, "Los Colibris", was established, a place for rest in the brief intervals between campaigns of activity in the field, and for the planning of future work.

An immediate result of this choice of a home has been an exceedingly interesting series of studies of water birds, some of which are already familiar to CONDOR readers. With the summer months spent in the field, photographing, observing, and collecting, and with the winters devoted to the arduous labors involved in the financial end of such an undertaking, time passes swiftly, and three or four years seems all too short an interval in which to produce such a book as the one planned. The field work so far has included expeditions to the Farallon Islands, to the Warner Mountains in extreme northeastern California, and to the Mount Whitney region, as well as numerous shorter trips. During the coming spring the Colorado Desert birds will receive their deserved share of attention. The Farallon trip was unexpectedly productive, of two birds new to California, the Black-throated Green Warbler and Oven-bird: rather startling records from such a locality.

As to the desirability of the work which Mr. Dawson has begun, and as to his personal fitness for the undertaking, there can be no question. Its tendency to awaken interest in the subject treated on the part of many who would be otherwise utterly indifferent is alone a feature the importance of which can not be overestimated. In every aspect of work in which we are all engaged, whether in trying to arouse interest in a Museum project, or in attempting to guide the public toward the enactment of intelligent legislation as regards the animal life of a commonwealth, there is almost always a long and usually discouraging period which must be devoted to educational work. During this period every energy must be devoted toward awakening a proper public sentiment in the matter, frequently overcoming unreasonable or adverse prejudice. In its educational aspect alone such a work as Mr. Dawson's is invaluable.

A book of the nature of the projected work occupies a distinctive position of its own. It in no wise conflicts with the more technical papers which other students are producing, but appeals to a clientele which the latter never reach,

one to whom the rather dry and formal style of the usual "state list" would appear to be extremely dull and uninteresting. To produce an artistic and attractive set of books, filled with beautiful illustrations and containing text which presents the subject matter in pleasing and novel style, is to popularize the subject of ornithology in a way undreamed of and impossible of attainment to the self-centered specialist, intent on his own particular line of study.

Those who have followed Mr. Dawson's work cannot fail to have been impressed by the originality of his style, and by the pleasing manner of treatment. It is given to but few writers on this or kindred subjects to say their say in such a way as to hold the reader's attention regardless of the fact as to whether or not he is particularly interested in the branch of science treated. Among the older writers on birds Audubon and Wilson at once spring into the mind as having owed their fame to this peculiar gift more, perhaps, than to any other of their ac-



Fig. 17. THE GATEWAY, LOS COLIBRIS

complishments. Coues, also, wonderfully attractive writer that he was, had to perfection the faculty of drawing a pleasing and fanciful sketch of a bird, and by means of most imaginative similes and comparisons, presenting an absolutely lifelike and accurate picture.

It is no disparagement of the many able and conscientious bird students of today to say that, however thorough and accurate their published writings may be, there are but very few who have this gift of holding the interest of the general public. Where we *do* find this faculty it is the duty, and most decidedly to the interest, of all ornithologists to see that the fortunate writer is given the utmost opportunity to use his talent to the best advantage.

In all of Mr. Dawson's work the feeling borne by a true lover of books as such toward a beautiful edition is very apparent. A cheap book has nothing to recommend it in his eyes, an attitude which has resulted in "patrons' editions"

and "editions de luxe" rather overwhelming to the student who has been accustomed to regard an outlay of a few dollars for bird books as something of an extravagance. So much depends upon the point of view! The present writer implicitly believes that certain books should most undoubtedly be made to sell cheaply. A hand book designed to help the beginner should certainly be issued in such a way as to most surely reach the audience for which it is intended.

On the other hand, that which is too easily obtained is apt to be held in but slight esteem. "The Birds of California" is not issued as a hand book, nor should it be compared with a dry and technical check list. It is a magnificent and artistic handling of a beautiful subject. Whoever secures a copy will have made sufficient of a sacrifice to obtain it to cause him to place high value upon his possession, a value it will amply deserve.

The originality and charm of Dawson's style is all his own, but with all his variety of expression there can be no doubt of his constant and conscious striving for accuracy. Perfection, of course, is attainable to none, but there is vast differ-

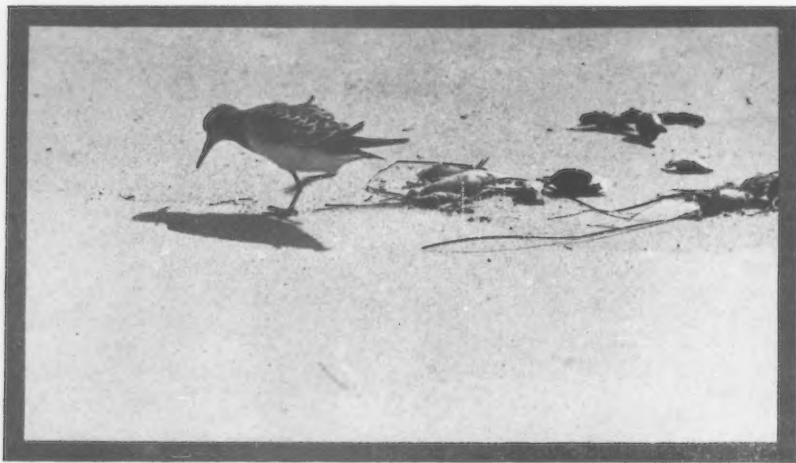


Fig. 18. THE BAIRD SANDPIPER

From a photograph, copyright 1913, by W. L. Dawson

ence between error of judgment and that of intent. A mere fact is of itself of no value. Different statements of the same fact will differ in value precisely as the men who report them differ in imaginative power. The man we listen to is he who lets his imagination play about a fact, who is able to see its relationships, and hence invests it with real value and interest.

The application of this test to Mr. Dawson's work apparently gives the real clue to the philosophy of his writings. He does not feel called upon to serve some such abstraction as Truth or Science, so much as to proclaim *now*, be it more or less complete, what may later on, after further assimilation, be readjusted and receive a different value from that accorded it today. In comparison with this attitude we may consider the opposite type, also found among us, the man who sits back and gloats over the realization that he has in his possession a vast store of accurate knowledge of some particular subject, known to no one else

and which he has no intention of parting with; deriving his pleasure from the faulty attempts of others less fortunately situated, along the same line of study. The mistakes sometimes made from a too hasty acceptance of first impressions seem of small moment compared with what may be endured through the peculiar temperament of this type of student. "It is better to play ball, even if you make a wild throw once in awhile, than it is to sit on the bleachers and carp at the players".

ALLAN BROOKS—AN APPRECIATION

By WILLIAM LEON DAWSON

WITH PORTRAIT

BROOKS is sitting right now at the great north window of our studio at "Los Colibris", whither we have succeeded in luring him for the winter.

His high stool is drawn up to a large work table, where he is alternately poring over a handful of bird-skins and sketching with swift, deft fingers an imaginary spray full of very real Warblers. He doesn't in the least suspect what I am going to do to him, and I am feeling somewhat guilty as well as very solemn in this most traitorous act of friendship. It is perfectly certain though that I shall catch it when he does find out, for he is, above all things else, a modest man, and would shrink from even the mellow light of THE CONDOR's pages.

Along the east wall of the studio stretches a length of burlap whereon are hung the latest products of the artist's skill, and I slip over once in a while to gloat over them all, or to make *moues* at the latest arrival, with all the easy assurance and something of the honest pride of the family doctor. Just now the Dwarf Hermit Thrush is paying court to a Flammulated Screech Owl, and the Elegant Tern is considering whether the Allen Hummer hard by would not make an elegant mouthful. In my opinion he would, for he is a quivery morsel of fire, alive in every iridescent vane. And it is first of all because these birds live, live and breathe and flaunt their feathers in our faces, that the life story of their re-creator is worth telling.

Allan Brooks was born of English parents on the 15th day of February, 1869, in Ettawah, India. His father, William Edwin Brooks, was a civil engineer in charge of construction on the East Indian Railway. Ornithology was the father's hobby, and young Allan took to it almost from infancy. Although he was removed at the age of five to the home land, as practically all European children must be to escape the unaccustomed diseases of a deadly climate, he remembers vividly many of the Indian birds, and articles in *Stray Feathers*, to which his father was a leading contributor.

Left to the various mercies of seven maiden aunts, the youthful Allan chewed and eschewed the catechism, attended school, robbed birds' nests, and early and irrevocably decided against matrimony. While other boys were playing cricket, he was roaming the hills, and by the time his fellows had mastered hazing he had learned the birds of England.

In 1881 the father returned to England after twenty-eight years' service in India, and almost immediately thereafter conducted his family of six members to Ontario, where Allan's mother died. The next six years were divided between farm-work, school, and the formation of an extensive collection of bird-skins. By rare good fortune there was at hand a full kit of brushes and water-colors, a heritage of the father's really creditable but self-depreciated years of effort. Young Allan



Fig. 19. ALLAN BROOKS
Photo by W. Edwin Gledhill

was given *carte blanche* with these brushes, although his father would give him no advice, and he painted—nothing but birds—painted day and night, until every species represented in his collection was reproduced in color.

In 1887, namely when Allan was eighteen, the family, then consisting of the father, two older brothers, and a younger sister, and himself, removed to British Columbia and settled on a farm in Chilliwack Valley, on the lower Fraser River. This little-explored region was quite to our subject's liking, and while he hated farm work, he found in bird-study a constant relief which made farm-life endurable.

In 1890 the Brooks home with the outbuildings, including a rude museum, was destroyed by fire. The young man succeeded in saving most of his birdskins—would have saved them all but for a murderous fusillade of exploding cartridges—but he lost ten years' notes and all his paintings.

Disheartened by this disaster and yet enthralled by the charm of the wilds, the ornithologist practically abandoned both his museum work and his painting, and gave himself over to hunting, trapping and exploring. For ten years he threshed out the mountainous section of southern British Columbia, until he knew it as a man knows his door-yard. As a result he recorded stuff from the general vicinity of Chilliwack which we didn't realize existed in the Northwest—had the skins to back it too—Bobolink, McCown Longspur, Harris Sparrow, Black-headed Jay, Stilt Sandpiper, Gray Gyrfalcon, and a score of others the mere mention of which thrills the nerves of a working ornithologist. To prosecute his studies and to carry on his field work after the family had again abandoned the farm and gone East, Mr. Brooks began to sacrifice his accumulated collections and the cream of his annual take as well.

The career of a collecting naturalist is seldom a prosperous one, and Brooks's was no exception. It is difficult for a distant patron to understand the hardships of the man in the field or to realize the acuteness of his necessities. Collecting for pay, indeed, is endurable only in the case of one who has a consuming passion for the wilds, and who is able to turn to final account the intimate knowledge of nature afforded by those hard-earned opportunities. Brooks had at least this to show for the ten years spent in enriching others, even though he himself would have prized more than most the choice things he had to pass on. He had, of course, himself to thank for habitual under-estimation of his own worth and opportunities. But it was hardly his fault when a wealthy English collector of international reputation offered him a bonus of *sixpence* for every new species of flea he should discover, and surrender. The savant made good too, and sent our supposed humble provincial a cheque for a shilling for *two* such new species. Brooks has it framed as "Exhibit A" of plutocratic munificence.

Toward the close of this decade Brooks resumed the brush in answer to repeated demands for detailed studies of "soft parts" of birds and big game. This led to more pretentious efforts, and sketches from life were submitted to one and another of those eastern customers who had bought skins or eggs of him. His black-and-white work began to appear in *Recreation*, *Forest and Stream*, *St. Nicholas* and other magazines, and he came to look upon sketching as a subsidiary means to a livelihood.

When "The Birds of Washington" was proposed in the fall of 1904, I wrote up to neighbor Brooks, whom I had never met, thinking to get a contribution of notes. In replying he enclosed a black-and-white, a sketch of a Black-throated Gray Warbler, asking me if I could use anything like that. My blood leaped at sight of it, for I had not known that anything of that quality was being produced

in the West. We arranged at once for forty black-and-whites, and later were able to stage the color-plates, which have given Brooks a favorable introduction to the world of bird-lovers. From 1906 on, Mr. Brooks has been kept as busy as the irreducible claims of field work would allow. He has thus taken his art seriously for seven years past, and has long since found himself, in confidence as well as in style and finish of workmanship.

Before we pass to an analysis of Brooks' art or to a consideration of the man himself, it may be as well to note his recent activities. Besides fugitive pieces owned by sportsman friends and admirers in British Columbia, Washington, and England, there are to date six principal collections of Brooks: Dr. William Brewster, of Cambridge, always a consistent friend of the young artist, has a small collection of his very early work, perhaps a dozen pieces of varying merit; Francis Paget, Esq., of London, has by far the largest and best general collection, comprising a series of ambitious paintings of big game and some of the larger birds, some twenty pieces in all; Colonel John E. Thayer, of Lancaster, Massachusetts, has a representative collection of earlier and smaller pieces, besides a series of sixteen bird-plates contained in his extra-illustrated copy of "The Birds of Washington"; Hon. John Lewis Childs has the finest individual collection of bird-plates extant, some forty pieces, illustrating the summer resident birds of his spacious grounds at Floral Park, New York; Miss Ellen B. Scripps, of La Jolla, has sixteen pieces of more recent work, most of them intended for future publication in "The Birds of California"; then, besides the accumulating store (something over one hundred) prepared for that work and now in the writer's custody, there are here at Los Colibris many originals of "The Birds of Washington" and a small collection of game pieces. Two other collections, since scattered, deserve passing mention—the Inghram Hughes Collection, of about forty earlier pieces, some of them of matchless technique and inspiration, which were scattered when that unfortunate plunger went to pieces in New York City some three years ago; and the Vienna exhibit. By request of the Provincial Government of British Columbia Mr. Brooks contributed nine pieces to the International Sportsman's Exposition at Vienna in 1911. By the conditions of the loan the sale of these paintings was not permitted; but one of the best of them, a magnificent Golden Eagle, was stolen—stolen, too, gossip has it, by one high in official position. (Poor fellow! One scarcely blames him. What else could he do if they wouldn't let him buy it?)

Of the critical judgment of Brooks's bird painting the writer is perhaps least capable, for he loves every line and shade as it falls away from the facile brush. But these characteristics at least are distinctive in Brooks's work:

The authority of intimate knowledge. The artist is first and always the scientist. He is by far the keenest observer of nature I have met. He is not only quick at field recognition, but he has an apparently inexhaustible store of exact information as to plumage changes, evanescent colors, scutellation of tarsi, and all else that pertains to the external appearance of birds. Add to this a memory photographic in its accuracy, and you have a sure foundation for authoritative painting.

This accuracy of knowledge is sustained by accuracy of method. Bills and feet (where human judgment is most fallible) are drawn to scale, and all the problems of light and shade, balance, texture, contour, and perspective, are thought through to a finish. When to this is added the artist's sympathetic imaginativeness, it is little wonder that we have living images instead of pale copies of birds.

It is always to laugh how promptly the casual bird-student criticises a bird-painting, especially if it is a bit unusual. It is trebly amusing if the artist is by, for he is able to sustain his position by exact citations and conclusive examples. The average bird-student finds that he is psychologically inaccurate in his observations, and his flimsy defenses go down under the merciless fire of question to which Brooks subjects his pretensions—not, indeed, to confuse the student, nor to justify Brooks, but to develop the truth. Fidelity to nature is instinctive with Brooks, but accuracy of drawing is as sedulously cultivated as are scales and appogiatura by a prima donna. It is basal. Much of his work will bear the microscope and all of it the telescope. Work which will bear both is rare, indeed, but painstaking accuracy of detail is united with depth, roundness, and life-like appearance, to a unique degree in the work of this artist.

Perhaps his chief distinction is a feeling for plumage. Brooks's birds are clad in *feathers*, fluffy, dainty, fimbriated feathers, which you would like to towsle in your fingers for the sake of seeing them fall back into place with almost sentient precision. We have all of us seen the other sort—coats of mail, or scales, and we hail with delight a man who *feels* a bird's definitive mark, feathers.

Naturalness and repose also characterize all of this self-taught artist's work. His birds are not doing stunts after the discarded fashion of Audubon, but they have the imperishable quality of repose, and this whether at rest or in action. There are bird portraits in the older style which fill you with a sense of disquiet. You want to quit their presence after a momentary glimpse, but you cannot so easily be rid of them. Their manifest discomfort haunts you forever after, and as often as you recall their strained attitudes, you are distressed. Not so with a Brooks. Be the bird flying, climbing, or standing, he is balanced. He can abide your absence, and you will return for another view as to the sight of a beloved pool.

Softness is another characteristic of Brooks's work, and it shows not only in his matchless feathers, but in his charming backgrounds. Brooks hates to do backgrounds with his birds, because he contends that we cannot see birds *and* scenery at the same time. And of course he is right. If the eye focuses on a bird, the scene goes out. But we have to compromise here. We can get enough fuzzy backgrounds with the camera. What we want to see, often enough at least, is the bird in his setting, even if we do violence to nature. What we get is really symbolism; and Brooks handles his backgrounds with so delicate a touch that we get the *sense* of the bird in his surroundings even if we have to admit, upon analysis, that the bird itself is too large or too well defined to pass for a photograph.

Bird paintings are for the most part necessarily illustrations, and as such they have abiding values. We want to get our friends at close range, arrayed in their best, and we want to see them with definitive distinctness in a clear light, together with such an investiture of appropriate surroundings as may be thrown about them. Bird "pictures" in the strict sense are possible only in the case of the larger species, where the subjects may be placed at a sufficient distance to be brought into focus along with trees and fields and mountains. They must appear, namely, beyond the hundred-foot, or universal focus, distance. The only exception possible to this rule is in the selection of appropriate floral or local setting, pitched to the same scale of magnitude as the subject. But this is not a critique on art, only a plea for honest judgment and discrimination in a field which has its confessed limitations, its impassable boundaries.

Beyond this realm Brooks can pass, and does pass in his delineation of big game; but he carries with him still, truth to tell, something of the spirit of his

other field. His interest centers first in the animal. He cannot avoid painting a portrait, whether of Caribou, Antelope, or Cougar, and his subject dominates or overrides a scene of immortal beauty. If we could spare him from the field of illustration, he could speedily escape from this mannerism. But can we so spare him? Speaking selfishly, we certainly cannot until "The Birds of California" is completed, for the task has become a sacred responsibility which no one else can so well meet as he.

In making strong claims for our western champion, I do not mean to overlook or disparage the work of that veteran bird-artist, Louis Agassiz Fuertes, of whom Brooks himself has the very highest opinion. These men are of the same "order of magnitude." Fuertes' work is bolder and more masterful, as he is undoubtedly the better draughtsman. Brooks's work is, perhaps, more subtle, restrained and finished. The former inclines to hardness of treatment, especially in his backgrounds, while the latter errs, if at all, in vanishing delicacies. Both of them so habitually amaze and delight us that we exclaim ten times to once we criticise.

Of Brooks the man I shall find it difficult to speak with a restrained enthusiasm. In the first place, our artist is thoroughly English, not atrociously, but naturally and delightfully so. In physical appearance he is a trifle under the average stature, but well-set-up and elastic withal. His hair is light and tends to baldness, while his countenance, which rather inclines to the florid, expresses at once modesty, geniality, and an innocence which is absence of guile rather than lack of *savoir faire*. A few wrinkles about the eyes show that the man has been much out of doors as well as that he is past forty.

Truth to tell, I had pictured my lion with a little more of the stamp of the woods upon him (we met him for the first time in Seattle in December, 1909), and was quite prepared to pardon a little ignorance of the conveniences, some degree of uncouthness even, but it required but a moment to perceive that Brooks was a perfect gentleman. His courtesy is no studied attainment, but is based alike on native generosity and the careful breeding of many generations. The soul of courtesy is unselfishness. The self-forgetful man is better equipped to appear in society than the carefully drilled person whose mask-strings are likely to break under unexpected strain. Brooks was born to the purple, and thirty years of woodcraft have not unsettled his claim.

As I had known by long correspondence, modesty is Brooks's most conspicuous trait. Modesty such as his may be a handicap, undoubtedly has been in the way of business success, but it is a grace of character of the rarest sort. There is no affectation about Brooks's. It reacts spontaneously, gushingly, whenever self is touched. Such a mental state is fortunately unconquerable. It simply refuses to believe half the good words said of it, and humbly tries to be worthy of the other half.

Brooks's modesty, however, will bear analysis. It is no mere fear of men on the one hand, nor unreasoning self-distrustfulness on the other. It comes rather from a clear vision of high ideals, high ideals of art, of conduct, and of scientific attainment, before which those who are wise are always humble. Brooks knows what he can do, and he does it rapidly, unassumingly, and unerringly. Or if he makes mistakes, he is the very first to acknowledge them.

All the more surprising is the man's unfailing modesty, in view of his breadth and versatility of interest and accomplishment. I knew Brooks was up on birds, and I presumed that he was somewhat versed in mammalogy, but when some one asked him how many mice there were in Chilliwack, and he rattled off

a dozen scientific names glibly, we were more than pleased. In like manner, a crab dissected at luncheon (with mayonnaise) was noted as so and so *major* or *principalis*, as the case might be. Casual mention of a butterfly led to quick inquiry as to species, a question I was helpless to answer.

A local bird-man, Rathbun, having been called in by the customs authorities for consultation in reference to a seizure of Japanese birds, mentioned the matter afterward in Brooks's presence. He pricked up his ears at once and there was soon an animated discussion on as to whether so and so of these absent exotics might have been *gordoni* or *japonicus*.

Nor is it in the realm of nature alone that our artist shows a keen interest and a retentive memory. Art, music, literature, are alike familiar grounds, and one wonders where a single gentleman very much devoted to sport out of doors, ever found time for all these things.



Fig. 20. HIGH TIDE: LONG-BILLED DOWITCHERS AT REST

From a photograph, copyright, 1913, by W. L. Dawson

The only accomplishment in which Brooks will frankly admit a proficiency is in cooking. This is evidently a legitimate subject for bachelor pride, in view of the inevitable thrusts aimed by us over-confident family men. But Brooks is humorously boastful of his triumphs in the culinary art, and to judge from his account of the swarms of visitors, prospectors, amateur sportsmen, and the like, who share his bachelor hospitality at Okanagan Landing, there must be a good deal in it. In fact I gathered that one reason for his willingness to quit the Okanagan country for the winter was a desire to shake some of these fair fodder friends and devote himself more assiduously to his art. And really, the amenities of human intercourse, however sweet, must give place at times to family cares, with the man who is wedded both to art and nature. When the claims of friendship become too exacting, there is nothing for it but to take to the woods, and this Brooks does for at least two months in every year. Of course he takes a friend with him, if one can be found who will hold up to his

pace. While excessively fond of the wilds, he enjoys a boon companion and dislikes absolute solitude, especially that of the lonely bivouac.

A keen sportsman and a crack shot, Brooks knows guns as a pianist knows his keyboard. He has killed every kind of big game in British Columbia save Cougars, which have curiously enough eluded him, and the walls of his lodge on the shores of Okanagan Lake are covered with trophies. He is also "leftenant" in the Canadian Militia and instructor in rifle shooting. One shudders to think how our artist might have been a mere globe-trotting game-killer, or even a dapper officer in the English army, a cock among guinea-fowls, if the scientific instincts had been less carefully schooled, or if the seeds of the ornithophilic passion had not found early lodgment in prepared soil. Artist, bird-lover, scientist, sportsman, explorer, genial host, and loyal friend—this is a very pleasant combination: and that it is embodied in a single unassuming personality, and a highly efficient one, is a matter of sincerest congratulation to those who know Allan Brooks. It is to him we look with confidence for a series of bird paintings, the most elaborate and beautiful which have ever been produced in America.

LEUCOSTICTE TEPHROCOTIS DAWSONI—A NEW RACE
OF ROSY FINCH FROM THE SIERRA NEVADA

By JOSEPH GRINNELL

(Contribution from the Museum of Vertebrate Zoology of the University of California)

WHEN judiciously employed, "geographical reasoning" proves of positive help in guiding the student towards the ascertainment of the results of speciation. Experience has taught us to expect that geographic differences of great or less degree are to be found in any animal of wide range, particularly if this range includes two or more areas each of which has marked faunal peculiarities. In other words, we are often able to anticipate the existence of a distinct new race of animal in a given region, on the basis of our knowledge of other animals in the same region, without ever having seen a specimen.

In spite of frequent aspersive comment directed towards those who have employed it, this is a perfectly good application of inferential reasoning. Needless to say, however, only the establishment of the concrete facts in the case, based upon conscientious study of actual specimens, can be regarded as adequate grounds for publishing a new name.

For many years students of North American birds have known that a certain species of Rosy Finch (*Leucosticte tephrocotis*) existed both on the high mountains of east-central California and on the northern Rocky Mountains of British America, even to eastern Alaska. But, notwithstanding critical attention from several keen systematists, no differences deemed worthy of separate naming have been published. In fact, this species of *Leucosticte* has been remarked upon as a Fringillid of relatively great range, and yet one in which geographic variation is notably lacking.

The present writer believes these conclusions to have been faulty, due in major part to lack of sufficient series of specimens in the various seasonal and age plumages. For he is now so fortunate as to have at his disposal for study the practically ideal material indicated beyond, and this study leads to an opposite view.

As giving foundation for suspecting the true state of affairs, even before this material was available for examination, the writer had assured himself that, as far as known, in not one single Boreal mammal or resident bird (other than the Rosy Finch) was the subspecies (or species) identical on the Sierra Nevada and on the northern Rocky Mountains. If the Rosy Finch should prove absolutely the same in the two areas, it would constitute the only known exception, and would for this very reason merit particular comment. The writer was prompted to see if the Rosy Finch had really defied the forces causing geographic variation in the other animals. Frankly, he would have been astonished to find the behavior of the Rosy Finch out of harmony with that of mammals and other birds of similar ecologic relationships.

But—critical study leads straight to the thesis that as with the other animals isolation of habitat by long distance (and under differing conditions) has resulted in subspecific divergence.

***Leucosticte tephrocotis dawsoni*, new subspecies**

Sierra Nevada Rosy Finch

TYPE.—Male juvenal; no. 20217, Univ. Calif. Mus. Vert. Zool.; Whitney Meadows, 9800 feet altitude, Sierra Nevada, Tulare County, California; August 7, 1911; collected by J. Grinnell.

DIAGNOSTIC CHARACTERS.—As compared with its nearest relative, *Leucosticte tephrocotis tephrocotis* Swainson, of the northern Rocky Mountain region, in British America and western Alaska: general coloration in all plumages grayer toned, less intensely brown, size slightly less, the bill being distinctly less in bulk, and wing averaging more rounded; juvenal plumage much grayer especially anteriorly both above and below; breeding females less different; breeding males least different, but still perceptibly less vivid in the chestnut about the head.

MATERIAL.—Of true *tephrocotis* there is available a series of twenty-three fresh skins loaned for the use of the writer by the authorities of the United States National Museum. These are beautifully-prepared specimens collected in the summer of 1911 by Messrs. Joseph H. Riley and Ned Hollister. The localities of capture are Moose Pass, and Moose Branch of the Smoky River, both in the Canadian Rockies and near to one another, the former in British Columbia the latter in Alberta. Since these localities are not on any map at hand, the writer was furnished information as to their whereabouts from Mr. Riley, to whom he is also indebted for the courtesy of offering him the material for systematic use.

Of *dawsoni* the material at hand consists of fifty-six specimens contained in the Museum of Vertebrate Zoology, chiefly of 1911 and 1912 collecting, in the Sierra Nevada of Tulare, Inyo and Eldorado counties, California. In detail the material at hand is made up of plumage-stages as follows:

Leucosticte t. tephrocotis

- 7 adult males (July, August), in more or less worn breeding and post-breeding plumage.
- 8 adult females (July, August), same condition.
- 8 juvenals (July, August), wing and tail feathers not fully unsheathed.

Leucosticte t. dawsoni

- 18 adult males (May to August), in more or less worn breeding and post-breeding plumage.
- 12 adult females (May to August), same condition.
- 11 adult males (September), molting to full winter plumage.
- 4 adult females (September), molting to full winter plumage.

II juvenals (August), full-grown; new feathers, of first winter plumage, showing in some.

MEASUREMENTS—The accompanying table of measurements is self-explanatory. It takes account of adults only, and in these care was taken to exclude examples obviously mutilated in respect to wing or tail feathers, or bill. A skin might have a perfect bill but quills too badly worn to warrant even an approximate dimension, and vice versa. Such a specimen is of course taken account of in the respect in which it does afford fairly reliable data. A percentage of error must occur, but it is the writer's belief that in taking the measurements he has erred as much on one side of the mean as on the other so that the relative size of the two subspecies in each respect, as far as shown by the material in hand, is approximately correct.

TABLE OF MEASUREMENTS (IN MILLIMETERS)

Figure in parenthesis in each column opposite "average", is the number of individuals measured in each case.

			Wing	Tail	Culmen	Bill from Nostril	Depth of Bill
<i>L. t. tephrocotis</i>	Males	Average	106.0 (7)	69.9 (7)	11.5 (7)	9.0 (7)	7.8 (7)
		Maximum	107.3	72.0	12.3	9.5	8.4
		Minimum	104.8	67.9	11.1	8.6	7.5
	Females	Average	100.9 (7)	66.2 (8)	11.4 (8)	8.8 (8)	7.8 (8)
		Maximum	104.2	69.8	12.0	9.4	8.4
		Minimum	97.6	64.4	10.8	8.3	7.4
<i>L. t. dawsoni</i>	Males	Average	104.6 (17)	70.4 (16)	11.1 (18)	8.6 (18)	7.0 (18)
		Maximum	107.6	74.1	11.7	9.3	7.2
		Minimum	101.3	67.7	10.6	8.3	6.7
	Females	Average	99.8 (8)	65.8 (10)	11.0 (11)	8.6 (11)	7.1 (10)
		Maximum	101.7	68.1	11.6	9.1	7.3
		Minimum	98.1	62.1	10.6	8.3	6.9

It is to be observed that in wing and tail length whatever difference exists is very slight, while in size of bill there is a notable difference amounting to from four to nine percent in favor of the northern race. Similar differences are shown in Ridgway's table of measurements of *Leucosticte tephrocotis* (*Birds N. and Mid. Amer.*, part 1, 1901, p. 69). It would appear that as in many other birds of like distribution there is a tendency towards large size in the north.

The interesting fact is here brought out that there is a pronounced greater frequency of a rounded type of wing in the Sierra Nevada bird than with the northern bird (see accompanying table). True, the actual differences involved are slight, but they are, never-the-less, significant, the correlation being with the different amounts of migration undertaken in the two races annually.

The outermost or ninth primary is longest in the majority of specimens of *L. t. tephrocotis*, the penult or eighth is next in length, the anti-penult or seventh is next in order; there being no variation in the succession of lengths of the rest of the primaries. In a plurality of specimens of *L. t. dawsoni*, the penult is longest, the anti-penult second in length, the outermost third in length. The formula "9-8-7" indicates the sharpest wing, "7-8-9" the most rounded; "8-9-7" and "8-7-9" are intermediate conditions, the former nearest the sharp extreme, the latter nearest the rounded extreme.

TABLE SHOWING FREQUENCY OF WING FORMULA

T—*L. t. tephrocotis*, 14 specimens.D—*L. t. dawsoni*, 23 specimens

		D	
		D	
T		D	
T	D	D	
T	D	D	
T	D	D	
T	TD	D	
TD	TD	D	D
TD	TD	TD	D
TD	TD	TD	D
9-8-7	8-9-7	8-7-9	7-8-9
Sharp-pointed	Wing	Rounded	

As far as known, the Sierra Nevada Rosy Finch does not leave its breeding grounds during winter farther than the near-lying mountain ranges immediately to the eastward. The British American race, however, is believed to furnish the individuals which occur in winter in the northwestern United States south to eastern Oregon, Utah and Colorado. At least a winter specimen at hand from Camp Harney, Harney County, Oregon, is distinctly *L. t. tephrocotis* as here restricted.

REMARKS—There is no spring molt in the rosy finches, but marked color changes are brought about through wear. By this process, the extensively pink superficial portions of much of the plumage in its fresh fall condition is lost by the time the breeding season is at hand, the underlying brown coloration being thereby rendered much more conspicuous. It is thus necessary in diagnosing specimens on the basis of color characters, as well as of wing formula, to take into account the stage of wear reached. The tone of coloration in fresh juvenal plumage would appear to be more determinant than that in worn breeding adults. And lacking perfectly comparable specimens, in fresh fall plumage, of the two races here distinguished, a juvenal is selected as the type of the newly named form.

The subspecific name given to the Sierra Nevada Rosy Finch is selected in recognition of the services to ornithology of William Leon Dawson. It has been the custom of systematists to signalize in like manner the work of fellow-systematists, of collectors, of benefactors to scientific institutions. In the present instance it seems to the writer quite in accord with this happy custom to recognize an eminent service to the literary and artistic sides of bird study. Mr. Dawson has contributed in this wise with marked success.



Fig. 21. BONAPARTE GULL IN THE ESTERO, SANTA BARBARA
From a photograph. copyright, 1913, by W. L. Dawson

GREAT DESTRUCTION OF BIRDS' EGGS AND NESTLINGS IN THE SIERRA NEVADA

By A. M. INGERSOLL

WITH TWO PHOTOS BY MRS. W. W. COOLEY

AS WE approached Cisco, Placer County, California, toward evening of June 7, 1912, the air seemed filled with the songs and call-notes of mountain birds. Observing that we had reached a section where birds were more numerous than is usual at so high an altitude as 5900 feet, I stopped my automobile at the only hotel in that charming resort and engaged accommodation for Mrs. Ingersoll and self. Knowing of no locality in the Sierras where small birds nested more plentifully than in that particular place, I anticipated the pleasure of adding much choice material to my collection of eggs. A few days' search, however, convinced me that I was not the only nest hunter, and that the Blue-fronted Jays had a great advantage over one who collects full sets only. Jays were no more abundant than in similar places elsewhere, but these particular birds doubtless had an extra strong desire for eggs and naked birds. No jays were detected in the act of eating well-feathered young. Other natural enemies were doubtless the cause of some of the nests being tenantless. But as the jays were the only robbers caught in the act of taking eggs and young, the principal havoc is attributed to them and to an unseasonable snow fall. It is to be hoped that birds in the surrounding localities were more fortunate in raising their young. For a wide spread destruction like that at Cisco would tend to wipe some species out of existence.

Following a week of delightful weather, a cold rain began falling on the morning of June 22, by night turning to sleet. At six o'clock on the morning of June 23 there was a depth of three and one-half inches of snow on the level. This snow was of a wet, clinging nature, weighing down every leaf and twig, and causing large branches and limbs of some deciduous trees to break. Clumps of bushes were generally weighted down to about half their height on the previous day.

Many nests that were on flexible branches had their contents spilled out, while those built against trunks of small trees or between the main stems of bushes were later in the day bombarded with huge chunks of snow dislodged by the wind. This permitted branches to spring violently up to their accustomed position, a further cause of destruction. Horizontal branches of large fir trees drooped and crushed nests that chanced to be located between them. It is easy to imagine that many sleeping birds were crushed to death as the snow-laden branches quietly settled on them. Personally I know of two instances. A brooding Audubon Warbler was killed, and two of her three eggs broken, in the nest situated thirty feet above the ground on the branch of a fir. The other instance was that of a Western Wood Pewee picked up from the ground with nest on dead aspen limb that had broken off and fallen from a height of some twenty feet. Another Wood Pewee's nest destroyed in the same manner, was found later in the day. While searching a large pine stub for the nest of a Sierra Creeper, I discovered a female Calaveras Warbler under a partially detached piece of bark. Her feathers were quite wet, and as the crevice was rather dry, I presume this ground-nesting bird was flooded out of her home and sought shelter as death approached.

While roaming over the mountain side at various times previous to the snow fall, no less than ten Calaveras Warblers expressed anxiety and disapproval of my presence when trespassing near their chosen nesting sites. Careful watching revealed two nests under process of construction. After the snow fall, I searched over the same ground on many occasions, and, as no warblers were heard or seen that could be identified as this species, I am of the opinion that all, or nearly all, perished in the catastrophe of June 23.

An apparent loss was only noticeable in three other varieties of birds. The fairly common Western Tanager was probably reduced in numbers one-third. Three pairs of Olive-sided Flycatchers had selected home sites at a distance of one half mile of each other. One had a nest more than eighty feet up on a horizontal branch of an immense fir; the others undoubtedly had nests concealed in dense foliage of lofty cedars. As but one bird was observed between June 22 and July 9, I surmise that the snow proved fatal to the others, for birds having such distinctive notes could hardly be overlooked by a person searching for them.



Fig. 22. CISCO, CALIFORNIA, FROM THE HOTEL GROUNDS; PHOTO TAKEN ABOUT 8 A. M., JUNE 30, 1912; TWO HOURS LATER THE TREES WERE NEARLY

FREE OF SNOW

Photo by Mrs. W. W. Cooley

For a week previous to June 22, I daily noticed a flock of six to seven Pine Siskins around the hotel barn. One fell a victim to the house cat; and the others vanished a day later. I might attribute their total disappearance to the cat and the snow, but I am inclined to believe that they moved on to a better feeding ground to establish a summer home; for a favorite food of the Siskin is the unripe seed of the dandelion.

The above mentioned cat was very destructive to bird life. He was seen to jump and catch a male Northern Violet-green Swallow as it flew over the croquet ground. He was also seen to stealthily approach and make an unsuccessful spring at a Pacific Nighthawk resting on the bare earth at the side of a mountain trail; and he was often found prowling beneath brushy thickets in search of prey.

As one cannot accurately estimate the mortality among adult birds, I merely state facts actually observed. This census of nests, found by the writer between

June 7 and July 9, 1912, within a radius of two miles of Cisco Postoffice, will enable the reader to form a fair idea of the tremendous loss in young birds and eggs in nests exposed to the elements and to the jays.

One nest of Plumed Quail (*Oreortyx p. plumifera*). The nest was evidently destroyed by an animal having sharp claws and long black hair—presumably a skunk. Sticky pieces of egg-shell were scattered around the nesting hollow.

One nest of Red-breasted Sapsucker (*Sphyrapicus v. daggetti*). Nest about ready for eggs, when birds were shot by a man camping under a nearby tree.

One nest of Olive-sided Flycatcher (*Nuttallornis borealis*). Nest was examined by means of a glass from a distance of 80 or 90 feet below. Previous to June 22 the birds were often seen, but not after that date.

Three nests of Traill Flycatcher (*Empidonax trailli*). A jay was seen at nest that had contained two eggs a few hours before. The other nests were wrecked, before completion, by snow bending apart the willow stems between which the nests were placed.



Fig. 23. CISCO, FROM ABOVE RAILROAD SNOW-SHED; PHOTO TAKEN ON JUNE 23, 1912, AFTER MUCH OF THE SNOW HAD MELTED

Photo by Mrs. W. W. Cooley

Nine nests of Western Wood Pewee (*Myiochanes r. richardsoni*). One nest and three eggs were taken by myself. One was partially dislodged by a squirrel running over same, when frightened by me while climbing an adjoining tree to examine a Kinglet's nest. Two nests were wrecked by snow. Two were emptied by jays (?). A bird was flushed from a single egg in a nest that contained two eggs when examined a few days previously. Two nests containing two and three eggs, respectively, were later observed to have brooding birds on each.

Four nests of White-crowned Sparrow (*Zonotrichia l. leucophrys*). One incomplete nest abandoned; also a nest with a fresh egg was abandoned for reason unknown to me. A nest with four eggs was later found to contain but a single sucked egg. One nest and four eggs were taken by a guest at the hotel.

Seven nests of Western Chipping Sparrow (*Spizella p. arizonae*). One nest and four eggs taken by a guest at the hotel. Two nests were emptied by

jays. Two with sets of eggs were destroyed by snow. One new nest was not later examined. One nest having eggs in it was inspected at various times until the young were about six days old, when some tragedy then occurred that left but a ruined home among the drooping branches of a tamarack tree.

Seven nests of Sierra Junco (*Junco o. thurberi*). Two nests with sets of eggs were taken by myself. One of these was peculiarly located, being back ten inches from opening of an old gopher's burrow, and six inches below the earth's surface. The eggs were out of sight and would have escaped my notice had the bird not flushed at close range. The situation of the burrow was a slight ridge or mound surrounded at a distance of 25 to 100 feet by huge drifts of snow remaining from winter storms. All new snow that fell on June 23 melted away within forty-eight hours. Two nests that held eggs when discovered were later found to contain dead nestlings. Two nests held dented and cracked eggs after the snow. One nest and five young were destroyed by some mammal, probably the same that dug the nearby nest of Plumed Quail out of the ground.

Sixteen nests of Thick-billed Fox Sparrow (*Passerella i. megarhyncha*). Two nests and sets of eggs were taken by myself. Two nests were emptied of eggs by children. One with two eggs was abandoned before incubation commenced. One with four eggs was destroyed by sheep feeding on foliage of bush. Five nests with dead nestlings were examined after the snow. Four nests were emptied by jays. One nest containing two pipped eggs was discovered through the actions of a jay that had its feast interrupted.

Two nests of Blue-fronted Jay (*Cyanocitta s. frontalis*). Only examined from beneath. Both nests placed on the inside framework of a snow-shed.

Two nests of Western Evening Grosbeak (*Coccothraustes v. montanus*). One contained but a single nestling a few hours old, when found July 3. On previous day a jay, chased by anxious grosbeaks and vociferous smaller birds, was seen to leave the clump of fir trees in which the grosbeaks' home was located, at a height of forty feet. I have no doubt but what the jay had feasted on the contents of this nest, and later came back and ate the remaining tidbit, for the nest was found to be empty on July 6. The other nest contained two dried-up nestlings when found by me.

Two nests of Cassin Purple Finch (*Carpodacus cassini*). The jays took eggs from both nests.

Four nests of Green-tailed Towhee (*Oreospiza chlorura*). Nest and four eggs taken by myself. The jays (?) emptied the other nests.

Five nests of Western Tanager (*Piranga ludoviciana*). Two nests and sets of eggs collected by myself. One nest examined from a distance of fifty feet only. The birds were not seen around this nest after the snowfall. Two nests were probably emptied by the jays.

Two nests of Tree Swallows (*Iridoprocne bicolor*). Young in both of them.

Six nests of Western Warbling Vireo (*Vireosylva g. swainsoni*). All six were destroyed, presumably by the jays.

Two nests of Calaveras Warbler (*Vermivora r. gutturalis*). Both abandoned before completion.

Three nests of California Yellow Warbler (*Dendroica a. brewsteri*). One nest and set of four eggs collected by myself. One destroyed by snow. One emptied by jays (?). This last nest held about two table-spoons full of snow water on June 25. I placed a corner of a pocket handkerchief in the nest and siphoned all the water away, then reinforced the weak willow branch on which the nest was attached. My assistance was evidently appreciated by the birds, for

within fifty-one hours two handsome eggs were deposited in the still moist nest. They were gone and nest badly mussed when next examined by me, July 1.

Seven nests of Audubon Warbler (*Dendroica auduboni*). One nest and set of eggs collected by myself. Two nests were destroyed by snow. The other four were probably emptied by the jays. A jay was seen to carry a nestling from one of them.

Three nests of Macgillivray Warbler (*Oporornis tolmiei*). I collected one nest and set of eggs. The others were visited by the jays. They left two sucked eggs in one nest and numerous fragments of sticky shell on the foliage of the bush in which nest was hidden from view.

Six nests of Golden Pileolated Warbler (*Wilsonia p. chryseola*). I collected two sets of eggs. The eggs in four nests hatched but seemed to have met the usual fate within one to three days.

One nest of Rock Wren (*Salpinctes o. obsoletus*). It was placed out of sight and reach, in crevice in face of a small cliff. Entrance to the nest was paved with pebbles and pieces of coal.

Two nests of Sierra Creeper (*Certhia f. selotes*). Young in both of them.

One nest of Slender-billed Nuthatch (*Sitta c. aculeata*). Not closely examined. A bird was seen to chase a chipmunk away from a tottering pine stub and then enter a crack at an estimated height of thirty feet.

Eight nests of Mountain Chickadee (*Parus g. gambeli*). Eggs were taken from one nest by a guest at hotel. Two nests held well-incubated eggs; and five held big families of young birds.

Three nests of Western Golden-crowned Kinglet (*Regulus s. olivaceus*). One contained a set of ten eggs on point of hatching. Two nests were torn out by the jays (?).

Two nests of Ruby-crowned Kinglet (*Regulus calendula*). One contained a set of eight highly incubated eggs on June 20. The other held a single fresh egg on July 6, and was empty the next day.

Three nests of Russet-backed Thrush (*Hylocichla u. ustulata*). One nest and five eggs, an unusual number for set of this species, was collected by myself. One new nest was tilted over by snow. One nest was partially emptied of fresh eggs by jays.

Twenty-four nests of Western Robin (*Planesticus m. propinquus*). One nest placed but four feet from the ground on small branches of a young fir, was tilted over by weight of snow, causing an egg to roll out and break. As the bird was endeavoring to incubate the remaining eggs in this poorly secured nest, I thought it best to remove the hazard by lifting the nest up from its original site and fastening with twine to the next higher whorl of branches. The eggs were successfully hatched, and the young reached the age of about seven days, when they, and probably one parent, were destroyed by an enemy unknown to me. Feathers of an adult robin were scattered beneath the empty nest. Two nests and sets of eggs were collected by myself, one of these sets consisting of six eggs, certainly an unusual number. Seven sets of two to four eggs were known to be successfully hatched. The snow-water flooded one nest and caused four eggs to be abandoned. Many nests were not looked into, but some that were known to be occupied previous to the snow were apparently deserted after June 23.

Three nests of Mountain Bluebird (*Sialia currucoides*). I removed a nest and set of six eggs from a pigeon-house that was on the inside of the railroad freight-house. The birds constructed another nest and presumably raised a fam-

ily in the same box. The other nest was situated in a knot-hole in a living aspen tree.

I am of the opinion that fledgelings were raised in but few of the one hundred and thirty nests exposed to snow and the Blue-fronted Jays; while most of the sixteen nests that were placed in cavities of trees, stumps, or rocks, escaped destruction of contents. The robins were seemingly unmolested by jays.

On leaving for Summit Station, July 9, I stopped for a few hours nest hunting along the state road at a distance of six to eight miles above Cisco and here I saw two Clarke Nutcrackers, one Hammond Flycatcher, three California Pine Grosbeaks, and a Sierra Hermit Thrush. All four are species of birds not observed at Cisco. I failed to discover the nests of any of them, however.

BIRDS OBSERVED IN THE SUMMER OF 1912 AMONG THE SANTA BARBARA ISLANDS

By HOWARD WRIGHT and G. K. SNYDER

WITH TWO PHOTOS BY THE AUTHOR

ON JULY 1st, 1912, Mr. J. R. MacIntock, W. S. Wright, Emerson Roche and the writers left San Pedro, on a fifty-foot sloop, for a short trip among the islands which lie off this portion of the California coast.

Our first stop was Santa Barbara Island, where we arrived early on the morning of July 2, after having been becalmed nearly all night. While approaching the island, we saw many flocks of Cassin Auklets, a fact which was hardly to be expected since Mr. George Willett found only a few pairs breeding here the year before.

When the rattle of the anchor chain broke the stillness, a great flock of gulls arose and came clamoring toward the boat. They were very tame and came almost to our hands to devour the scraps from our breakfast table.

The day was spent in looking about the island. We found the gulls breeding in four separate colonies, all of which contained young. A single set of two, which turned out to be addled, were the only eggs of this species found. On the northern slope of the island was a large colony of California Brown Pelicans. There were several hundred nests containing young in all stages of development. A single set of three addled eggs served to intensify the impression of general prosperity in the colony, which gave every indication of rapid increase in numbers.

On the northwestern promontory we noted an adult Bald Eagle accompanied by a full-grown youngster. They circled about screaming loudly but seemingly having little fear of the intruders. A careful search of this territory failed to reveal any Cassin Auklet's burrows, so we concluded that their nesting was still confined to the adjacent rock, where Mr. Willett found them in 1911.

On the northeastern point of the island a single egg of the Xantus Murrelet was found, at the end of a short burrow under a rock. No bird was on the nest and though the egg was apparently fresh it was cold when found.

The second day at this island was spent in visiting a large colony of Brandt Cormorants. It was located near the water's edge, on the northern side of the island opposite the detached rock which is about a hundred yards from shore.

There were about three hundred and fifty nests counted, all of which contained from one to five eggs, many of them on the verge of hatching.

Early on the morning of the fourth we hoisted anchor and set sail for Anacapa Island. On rounding the northeastern point of Santa Barbara Island, five Tufted Puffins were flushed from the water. They were quite wild and we could not get within gun-shot of them. They probably were breeding on the little island on the northern side, where we found several likely looking burrows the day before, but could not gain entrance to them.

We anchored at Anacapa on the afternoon of the fourth and spent the time until dark trying to rid our clothes of the moisture which they had absorbed on the latter part of the trip.

Next morning, the three younger members of the party rowed along the coast to look over the country and its bird population. Within a few minutes

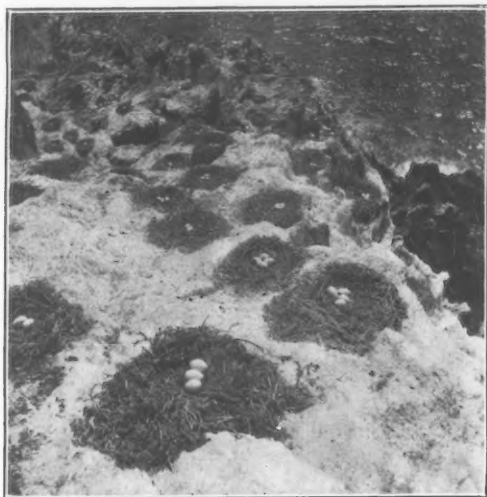


Fig. 24. TYPICAL NESTS AND NESTING SITE OF BRANDT CORMORANT; PRINCE ISLAND, NEAR SAN MIGUEL ISLAND, JULY 12, 1912

three Black Oystercatchers had been laid low and these proved to be the only ones seen on this island. At the east end we saw great numbers of Tufted Puffins, cormorants, gulls and pelicans; so we found an accessible place to climb the cliffs and were soon at the top. A long and diligent search revealed a few puffin burrows occupied by young; but the egg season seemed past. One burrow produced a dead *Xantus Murrelet* and a rather ancient egg.

Baird Cormorants nested in inaccessible places and they apparently had young, though we did not actually get to see them. The pelicans, though present in great numbers, were not breeding. There were a considerable number of nests, all empty with the exception of a single fresh egg found in one of them.

On a high cliff near the east end, the fresh remains of a Socorro or Black Petrel were found. The bird had been eaten by some bird of prey or possibly a rat, and the feathers were scattered about considerably. No nest was located,

though we nearly leveled that portion of the island in our attempt. By this time the wind was kicking up quite a sea and we hastened to return to the shelter of the sloop.

Early the next morning we rowed toward the west end of the island, and near the water's edge found nesting caves of the Pigeon Guillemot, containing about half-grown young. We set sail about noon for Santa Cruz Island; and the next few days were spent in loafing about the beautiful little harbors that this island affords. Various trips into the canyons netted little of unusual interest, though the numerous resident land birds were much in evidence.

It was not until the far end of the island was reached that the "prize find" of the trip was made. We had stopped to explore the "Painted Cave" from a scenic point of view, but once there the great number of Pigeon Guillemots present invited search for their nests. One large sloping ledge, which seemed particularly good, was being explored by the aid of a lantern with the hope of finding a guillemot's egg unhatched. The way was dark and as the lantern was flashed about to find secure footing it fell on a small bird crouched on the open floor of the ledge. The bird, evidently blinded by the light, was easily captured and proved to be an Ashy Petrel brooding a well incubated egg. Thus encouraged, a most careful search was made with the result that four eggs and one small young, together with the adults, were taken. The "nests" were all entirely exposed, though one was in a shallow hole in the rocky side of the cave. This in light of their usual breeding habits seems strange, because numerous fragments of rock which had fallen on the ledge afforded hiding places, and were utilized for this purpose by the Guillemots. A single addled Guillemot's egg was an incident of the search, while the young in all stages were quite numerous.

We went from the Painted Cave, on Santa Cruz, to Santa Rosa where we anchored over night. This island did not seem very promising and early in the morning of the next day, under double-reefed mainsail, we left for San Miguel, the most northerly and least often visited island of this group. After a long, weary day of sailing and salt water shower-bath combined, we anchored in the bay at about sundown.

This island, which is about six miles long and four miles wide, is nothing but a vast pile of continually shifting sand. The wind never ceases and a "calm" day there would be a storm most any where else. The bay is fairly well protected, as it opens toward the east, but even here the sand laden wind howls unceasingly. The one redeeming feature of this place is Prince Island, a small rocky island in the mouth of the bay. This big rock or little island, which is quite high and steep, is literally alive with breeding birds at this season of the year.

To this place we rowed on the morning of the 12th, and found an easy landing place for our skiff. Here in suitable places we found great numbers of breeding birds such as the California Murre, Tufted Puffin, Brandt Cormorant, and Cassin Auklet. A rising sea warned us that we must hasten back to the sloop while we could safely do so.

The next day we set sail on the return trip deeply regretting that we could not have explored Prince Island more fully.

The following is a list of birds observed upon the trip, together with brief comments on each:

***Lunda cirrhata*.** Tufted Puffin. Probable breeding burrows found on the rock on northeast end of Santa Barbara Island. Five birds seen in this vicinity next day (July 3-4). The birds were quite numerous on the east end of Ana-

capa, but very few of their burrows were accessible. Those examined contained either young or egg-shells (July 5). Several birds noted flying about the west end of Santa Cruz (July 10). On Prince Island the largest colony was found. Numerous burrows examined contained young from a few days to several weeks old. The birds when disturbed circled over the water and returned to their burrows only to repeat the performance (July 12).

Ptychoramphus aleuticus. Cassin Auklet. A number of these birds seen as we approached Santa Barbara and one was taken. A thorough search of the northwest end of Santa Barbara netted nothing but the wings of those birds whose bodies had been eaten, probably by cats (July 2-3). On Prince Island a very large colony nested on the northwest and north slopes, where there was ground in which it was possible for them to burrow. In many places the ground was so undermined by the nesting places of these birds as to render walking difficult. At this season of the year the eggs had all hatched, as all the burrows examined contained good sized young (July 12).

Brachyramphus hypoleucus. Xantus Murrelet. One egg of this bird taken from a hole on the northeast point of Santa Barbara Island, and several wings found (July 3). On Anacapa, three dried-up remains, one whole egg and numerous shells testified to the breeding of this bird on the island during this or some previous season. No live birds were noted (July 5).

Cephus columba. Pigeon Guillemot. These birds were seen carrying some material into inaccessible caves on the northern part of Santa Barbara Island, indicating that they had young (July 3). On Anacapa a pair were noted near the east end of the island. On the west end three nesting caves were found each containing a single well-grown youngster (July 5-6). These birds were breeding in considerable numbers at the Painted Caves on Santa Cruz (July 10). Numbers seen entering low caves on Prince Island (July 12).

Uria troile californica. California Murre. At Prince Island there were several small colonies of these birds on the high overhanging ledges. The odor, filth and continual pig-like, grunting noises emitted by the numerous young made close inspection of these ledges quite an unpleasant task (July 12). Several eggs were collected, however, and they proved to be addled. One egg, in fact, which had been dug from the accumulations of guano, turned out to be an over-ripe specimen which tested the collector's stomach during the blowing operation.

Larus occidentalis. Western Gull. The first night out, while becalmed in a heavy fog some ten miles from Santa Barbara Island, these birds were seen passing the boat, all flying unerringly in a southwesterly direction toward the island (July 1). The young of this species on Santa Barbara were pretty well grown and proved very agile when pursued. They had a very amusing habit of "playing ostrich" by tucking their heads under a thick weed and closing their eyes, leaving their downy bodies entirely exposed (July 2-3). Colonies containing young were also found on Anacapa (July 5) and on Prince Island (July 12).

Larus heermanni. Heermann Gull. A number of these birds were seen near Santa Cruz Island (July 6).

Puffinus creatopus. Pink-footed Shearwater. Seen in the channel between Santa Barbara and Anacapa islands (July 4).

Puffinus griseus. Sooty Shearwater. Seen in company with the preceding species.

Oceanodroma homochroa. Ashy Petrel. Found breeding at the "Painted Caves" on Santa Cruz Island (July 10).

Oceanodroma, sp. ? The remains of a Socorro or Black Petrel were found on Anacapa Island (July 5).

Phalacrocorax auritus albociliatus. Farallon Cormorant. The main colony of these birds on Santa Barbara was on the high bluff on the northwest part of the island. These nests, together with those of the pelicans, were built among the stalks of a kind of "marguerite" which grows abundantly at this point. The cormorant nests were built entirely of weed stalks and twigs which readily distinguished them from those of the following species, which were entirely of seaweed. The nests contained from one to four eggs or young (July 2). On Anacapa a few pairs had just finished nests on the cliff-sides. These showed the same distinguishing materials used in construction.

Phalacrocorax penicillatus. Brandt Cormorant. A large colony nested on a low exposed ledge on the northwestern side of Santa Barbara Island. There were about 350 nests containing from one to five eggs or newly hatched young.



Fig. 25. YOUNG CALIFORNIA BROWN PELICANS ON SANTA BARBARA ISLAND, JULY 2, 1912

This colony had evidently been used for some years as the nests were very close together and well cemented with guano. The birds were very much more wild than the preceding species. On the rock before referred to, about a hundred yards away, was a fair-sized colony in which all the nests contained nearly full-grown young. On our approach they took to the water where their awkward attempts to dive resulted in nothing more than the immersion of their heads (July 3). On Anacapa a few pairs nested on the cliffs, over the entrances to caves mostly (July 5). Prince Island supported another colony of these birds. The nests contained from one to five eggs (July 12).

Phalacrocorax pelagicus resplendens. Baird Cormorant. Several small colonies of these birds nested above the entrances to caves on the west end of Anacapa Island. The birds were extremely shy (July 6).

Pelecanus californicus. California Brown Pelican. On Santa Barbara Island,

between three and four hundred birds were breeding in company with Farallon Cormorants. All nests contained young still in the downy stage (July 2). On Anacapa were a large number of birds which apparently were not breeding (July 5). These birds were very numerous about Prince Island, but we did not see any breeding places as we visited only the west end of the island (July 12).

Ardea herodias. Great Blue Heron. A single bird seen on Anacapa July 5, and one on Santa Cruz July 7.

Arenaria interpres morinella. Ruddy Turnstone. One seen at close range near Pelican Harbor, on Santa Cruz, and positively identified (July 8).

Haematopus bachmani. Black Oystercatcher. Three taken on Anacapa July 3, and one taken and others seen on Prince Island July 12. They were easily approached.

Zenaidura macroura marginella. Western Mourning Dove. Fairly common in the canyons of Santa Cruz Island. A nest found in a small tree about seven feet from the ground contained one egg on July 7.

Haliaeetus leucocephalus leucocephalus. Bald Eagle. One adult and a young one seen on Santa Barbara Island (July 3). One seen on a high cliff at Santa Cruz on July 7.

Falco peregrinus anatum. Duck Hawk. One seen on Anacapa (July 3), and two on Prince Island (July 12). They were very wild.

Falco sparverius. Sparrow Hawk. One seen in the canyon back of Pelican Harbor on Santa Cruz (July 7).

Colaptes cafer collaris. Red-shafted Flicker. Abundant among the pines on Santa Cruz.

Sayornis nigricans. Black Phoebe. Seen in the canyons on Santa Cruz.

Empidonax difficilis difficilis. Western Flycatcher. Found breeding abundantly on Santa Cruz. One nest was in a cave the floor of which was wet by the high tides. Two eggs of this species were found laid on the bare rock in a hole in a large boulder.

Otocoris alpestris insularis. Island Horned Lark. Found on Santa Barbara Island.

Aphelocoma insularis. Santa Cruz Island Jay. This species was very common in the wooded districts of Santa Cruz. Two full-grown immatures were taken (July 7).

Corvus corax sinuatus. Western Raven. These birds were common in the canyons on Santa Cruz Island. Their nests were found in crevices in the cliffs overlooking the water. These were of course unoccupied at this season of the year. An old nest undoubtedly of this species was found on a ledge scooped out of the walls in one of the sandy canyons of Santa Rosa Island.

Sturnella neglecta. Western Meadowlark. This bird's notes were heard many times while we were on Santa Cruz, and one morning a bird flew across Pelican Harbor. Noted also on Santa Rosa Island (July 10).

Carpodacus mexicanus clementis. San Clemente House Finch. Seen on all the islands visited.

Melospiza melodia graminea. Santa Barbara Song Sparrow. Found on Santa Barbara Island wherever brush afforded protection. Young were found, but no occupied nests.

Pipilo maculatus clementae. San Clemente Towhee. Adults and good-sized young were seen on Santa Cruz Island.

Hirundo erythrogastra. Barn Swallow. Birds seen entering caves on Santa Barbara Island. On Santa Cruz a nest containing young was discovered on a

cliff overhanging the ocean. A nest was found on Anacapa which contained a single addled egg.

Vermivora celata sordida. Dusky Warbler. Very abundant in the wooded parts of Santa Cruz Island.

Salpinctes obsoletus obsoletus. Rock Wren. Adults and full-grown young seen on the rocky slopes of Santa Barbara. Also noted on Anacapa.

Thryomanes bewicki nesophilus. Santa Cruz Island Wren. Common among the fallen pines on Santa Cruz. Young just able to fly were seen. One nest, containing four eggs on the point of hatching, was found in a hole in the canyon wall, about seven feet up, made of sticks and feathers.

Psaltiriparus minimus californicus. California Bushtit. One flock seen in the brush on Santa Cruz Island on July 7.

FROM FIELD AND STUDY

Late Fall Occurrence of the Black-headed Grosbeak.—On November 23, 1912, I took a specimen of the Black-headed Grosbeak (*Zamelodia melanocephala*) at Riverside, California. The occurrence is of interest on account of the date, which is so far from the ordinary movement of this species in California, as well as from the fact that the bird is in full autumnal plumage.

So far as I have been able to learn, with the courteous assistance of Mr. J. Grinnell, there is no published account of the bird's having been taken in the United States otherwise than in the breeding or in the first juvenal plumage. The specimen at hand is not in either of these plumages, and appears fresh and unworn. Beebe in "Two Bird Lovers in Mexico" speaks of the grosbeaks in their dull winter plumage looking like large sparrows; but so far as I can learn, the fall plumage is not familiar to many CONDOR readers. The specimen was a female with well developed ovaries, which would suggest that the bird had passed one breeding season and might be considered an adult. Mr. Grinnell offers the suggestion that in this species first-year individuals may perhaps be subject to a period of autumnal sexual activity, as is probably the case with certain of the resident species of the southern part of the state. The female in hand may thus be a bird of the year. It seems now impossible to state with certainty that the bird is either adult or juvenal.

The plumage is notable for the rich tan suffusion of the breast, the obscuring of white spots by buffy feather tips, the fact that spots have not been lost by sloughing off of bars such as occurs in worn plumages of the species, and that the upper tail-coverts bear indistinct transverse bars.

The specimen has been deposited in the Museum of Vertebrate Zoology of the University of California and may be referred to as no. 23431 of the collection of that institution.—
LOYE MILLER.

The Results of Some Miscellaneous Stomach Examinations.—The following notes on the results of stomach examinations of several different species of birds should be of interest. The stomach contents does not represent in all cases the usual kinds of food taken by the species. The greater interest generally attaches to the unusual. It is important that both the usual and the unusual articles of diet be known.

Porzana noveboracensis. Yellow Rail. Rincon Valley, Sonoma County, California, November 17, 1912. Stomach contained 18 clover seeds (*Trifolium* sp.) and grass.

Archibuteo ferrugineus. Ferruginous Rough-leg. Cotati, Sonoma County, California, November 25, 1912. Stomach contained seven meadow mice (*Microtus californicus*). This appears to be the first definite record of a Ferruginous Rough-leg taken within the state for a number of years.

Bubo virginianus pacificus. Pacific Horned Owl. Berkeley Hills, Berkeley, California, December 15, 1912. Stomach contained two meadow mice (*Microtus californicus*) and 27 Jerusalem crickets (*Stenopelmatus* sp.).

Geococcyx californianus. Roadrunner. San Diego, San Diego County, California, September, 1912. Stomach contained a large horned toad (*Phrynosoma blainvilliei blainvilliei*).

Chordeiles virginianus hesperis. Pacific Nighthawk. Dutch Flat, Placer County, California, August 22, 1912. Stomach contained 1 wood-boring beetle (*Elaphidion* sp.), 17 wood-boring beetles (*Crioccephalus agrestis*), 3 click-beetles (*Elateridae*), 3 curculios (*Balaninus* sp.), 3 metallic wood-boring beetles (*Melanophila* sp.), 1 grasshopper, 16 moths, 3

stink-bugs (*Podisus* sp.), and 2 stink-bugs. All of these insects are considered injurious. The specimen from which this stomach was taken is no. 23181, University of California Museum of Vertebrate Zoology.

Sturnella neglecta. Western Meadowlark. Los Banos, Merced County, California, April 21, 1911. Stomach contained over 40 plant lice (*Aphis brassicae*) along with parts of 8 ground beetles (*Pterostichus* sp., *Blapstinus* sp., *Coniontis subpubescens*), 1 snout beetle (order *Rhynchophora*) and parts of 12 crickets (*Gryllus pennsylvanicus*).

Planesticus migratorius propinquus. Western Robin. Orchard, Big Pine, Inyo County, California, January 23, 1911. Stomach contained 192 small cutworms.—H. C. BRYANT.

The Stephens Fox Sparrow in Marin County, California, once more.—The recent cold spell and unusual snowfall in California during the first half of January, 1913, brought to mind the association of such an occurrence with the presence of Stephens Fox Sparrows on the higher ranges at San Geronimo, Marin County, California (See CONDER, xiv, March, 1912, p. 63).

On the first opportunity that offered, which happened to be January 21st, a trip was made to the spot where these birds had been seen on other occasions and under similar circumstances. Frost and ice were in evidence that morning on all sides, but these disappeared as the bright sun warmed up the atmosphere. The top of the range was reached by eleven o'clock, and a careful search for the expected visitors was made. At first none was to be seen, but finally one was observed to pop up out of a ceanothus bush and at sight of a human being to dart back into his dense refuge, while all efforts to bring him to view again were fruitless.

The same thing happened with another, after which two hours of watching, alternated with tramping through the brush, were passed before another was seen. This one was almost stepped upon in a little thinner brush, and in his fright stayed on top of a bush long enough to be fatal. It was very close shooting, but a good many feathers and the bill remained—enough to identify the bird positively as *Passerella stephensi*, as was expected. It proved to be a female, as were all the others in our collection from this locality. No more were found on this date, nor was a single one identified on a second trip made to the spot four days later, though a few slight sounds were heard that seemed to indicate the presence of one or two.

As a rule some of the numerous subspecies of *Passerella* that winter along our California coast are very numerous at San Geronimo at this season; but this year they seem extremely scarce, and only one was seen in the two days tramping above spoken of.—JOSEPH MAILLARD.

Artificial Hatching of a Cassin Auklet.—While studying birds on Off-shore Rock, Humboldt County, California, in company with F. J. Smith, I took from a burrow a stone-cold Cassin Auklet's egg, advanced in incubation, and placed it in a fish basket together with other eggs.

This was about noon on July 21, 1912. The basket was carried about for several hours, then placed in a boat for an hour, removed to a train for a thirty mile run and at 7 p. m. carried home, where it was placed on a table and left over night. The next morning peeping was heard from within the basket and on hunting out the egg from which the sound came, it was placed in a cigar box on a bed of cotton, the box then placed in a warm oven. At 4 o'clock p. m. the same day, July 22, a wet, sticky, yolk-covered auklet, struggling for freedom, broke through the shell.

Left on the cotton in the box it was placed in the warm sunshine to dry. After being thoroughly dried, Mr. Smith's mother fed it bits of boiled egg, which it seemed to relish and stretched its little neck to receive.

The auklet was kept warm in cotton and fed regularly for several days. Its little body grew to a length of 3.75 inches, with an extent of wings of exactly 3.75 inches also, the down on the bird's body fluffing out thick and warm. On July 26, at just 10 o'clock a. m., our little Cassin Auklet (*Ptychoramphus aleuticus*) passed away, leaving no trace of reason why it had died, with all the care that had been given it. The bird lived just ninety hours. It is now skin no. 275 of my collection.—C. I. CLAY.

Gambel Quail (*Lophortyx gambeli*) in Colorado.—Regarding the status of this bird in Colorado I think I may be able to throw some light. It has for some years been believed to be a rare resident in the southwestern corner of the state. Prof. Cooke gives the Morrison record of these birds having been taken forty miles southwest of Fort Lewis. Sclater

in his "History of the Birds of Colorado", in speaking of this record says that it would carry the species well over into New Mexico, which it probably would as Fort Lewis is only about twenty miles north of the New Mexico line.

That being true, this may possibly be the first record of its having been actually taken in the state. In the latter part of September, 1912, in company with Prof. Figgins I took a collecting trip through the southwestern quarter of Colorado. Our first work was done in the Uncompahgre Valley after the California Quail (*Lophortyx californica*). Up to this time *L. californica* was supposed to be the quail of this section of the state. This valley, or the part of it that we worked, is between 100 and 120 miles north of the New Mexico line, and between 54 and 60 miles east of the Utah line.

We took ten birds and all were *L. gambeli*. Not a specimen of *californica* did we find in our two days' drive up and down the valley. *Gambeli* was everywhere and so abundant in places that I could have taken them by the hundred if I had so wished to do. Later, in correspondence, a resident there said he thought there were two species of quail in the valley, and that he would be glad to send us some of the other kind. He sent us two lots of them, but they all proved to be *gambeli*.

I might add that our trip took us through Montezuma and La Plata counties, the two southwestern counties of the state, but that we failed to learn of Gambel Quail in either of these counties. Of course this does not necessarily mean they are not there. This does, however, settle the fact that they are residents of the state and that they are locally abundant.—L. J. HERSEY, Curator of Ornithology and Mammalogy, Colorado Museum of Natural History.

Some Winter Notes From the Bitter Root Valley, Montana.—On December 26, 1912, I saw a Townsend Solitaire (*Myadestes townsendi*) eating the berries from a red cedar. It was very tame, allowing me to approach within twenty feet before leaving, then only flying a little way. A few minutes later on the same day, I flushed a Long-billed Marsh Wren from a cattail swamp. Within a hundred yards of the wren were six Red-winged Blackbirds.

This is the warmest valley in Montana, so we have here birds which usually winter farther south. Western Meadowlarks winter here abundantly. Mallards and Killdeer are always fairly common, Wilson Snipe are regular winter visitants, and Golden-eyes are rare winter visitors, arriving in the valley about January 1, and leaving about March 1. A Mourning Dove was seen two miles southwest of Corvallis during December, 1912.—BERNARD BAILEY.

A Northern Winter Station for the Band-tailed Pigeon.—On the south side of the Pit River, about two miles from its junction with the Sacramento is a certain hillside to which Band-tailed Pigeons (*Columba fasciata*) regularly resort during the winter season. I am accustomed to pass that point several times each year, on my way from Pitt, the Southern Pacific junction, to Wyndam, on the line of the Sacramento Valley and Eastern. The motormen and conductors told me that they had frequently seen flocks of pigeons there, and on one occasion I was fortunate enough to see a small flock myself, as we passed by. On February 22, 1913, the motorman stated that he had the previous week seen a flock of two or three hundred. It has seemed to me remarkable that these flocks should come yearly to the same hillside, where they sometimes linger for many days, and further remarkable that they are not observed elsewhere in the run of twelve or fifteen miles from Pitt to Bully Hill.—C. H. GILBERT.

Early Arrival of the Back-headed Grosbeak.—On the morning of February 15, 1913, about ten o'clock, there appeared at my window-shelf bird-table a gorgeous male Black-headed Grosbeak (*Zamelodia melanocephala*). He helped himself to the bread on the board and when frightened flew into a nearby elderberry tree. He came back to the table several times and was about for most of the forenoon. I have not seen him since. My earliest record for these birds last year is March 25, when a male came to this same bird-table. Not only is this early appearance of the Black-headed Grosbeak of interest, but the fact that he was in full summer plumage seems worthy of note. He was one of the bright-plumaged males, not having the dull coloring that some of these males have even in the summer time.—HARRIET WILLIAMS MYERS.

THE CONDOR

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HARRY S. SWARTH, Associate Editor

J. EUGENE LAW

W. LEE CHAMBERS } Business Managers

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EDITORIAL NOTES AND NEWS

The Business Manager's report of the Cooper Club's financial standing at the close of the year 1912 is a model commercial document. The itemized statements of receipts and expenditures are accompanied by a full inventory of Club property. While lack of space prevents giving the 7-page report in full, the following summary shows the main points as regards money transactions:

Balance in bank, January 2, 1912....	\$ 333.35
Dues received during 1912.....	691.22
Subscriptions during 1912.....	167.20
Sale of Avifaunas.....	24.50
Sale of back numbers of CONDOR....	121.60
Donations, etc.....	3.00
Advertising.....	43.45

Total Receipts.....	\$1384.32
Cost of printing CONDOR.....	760.98
Cost of illustrations.....	167.50
Club expenses.....	43.96
Miscellaneous expenditures, chiefly connected with CONDOR.....	168.49
Cost of store-room.....	61.85

Total Expenses.....	\$1202.78
Balance in bank January 2, 1913.....	\$ 181.54
Cash on hand, not deposited.....	31.59
Total available cash.....	213.13
Outstanding 1912 bills payable.....	191.35

Net Balance.....\$ 21.78
The financing of Avifaunas 7 and 8 is accounted for separately. Their cost (\$500.00) was raised by donation.

Mr. Harry S. Swarth, for nearly five years Curator of Birds in the California Museum of Vertebrate Zoology, transferred his affiliation on February first to the new Museum of History, Science and Art, in Los Angeles. The change is accompanied by considerable increase in responsibility as well as in remuneration. While we see in this advancement a well deserved recognition of Mr. Swarth's efficiency there is one element that seems to us regrettable, namely, that the prospects point towards his time being henceforth so fully occupied with executive routine that ornithology will receive correspondingly less attention from his judicious and accurate pen.

In the great majority of cases nowadays, when a young man reaches an advanced degree of proficiency in bird-study, the ability thus developed makes him desirable in some executive berth, and the matter of salary concludes the argument. At present, there appear to be practically no purely research positions in ornithology, offering anywhere near an adequate livelihood, available to the talented and ambitious young student anywhere in America. Very nearly all the published ornithology turned out is a bi-product of busy men's activities, which are by necessity centered elsewhere.

The following excerpts from a recent circular letter sent out from the Smithsonian Institution show progress in Mr. A. C. Bent's undertaking to carry on the life history project so ably begun by Bendire.

In 1910 arrangements were made with the Smithsonian Institution for the completion of the work on the life histories of North American birds, which was originally projected by Major Charles E. Bendire, and of which the Institution published two volumes. For over twenty years Mr. Bent has devoted his spare time to visiting various points of ornithological interest in North America for the purpose of collecting the information, photographs and specimens necessary for an extensive work on the breeding habits of North American birds.

Major Bendire's first volume began with the Gallinae, A. O. U. number 289, and his second volume ended with the Icteridae, A. O. U. number 513, including 223 species in the two volumes. Considering the fact that comparatively little is known about many of the water-birds and that many of the ocean wanderers and stragglers need little more than passing mention as American birds, it seems safe to count on covering all of the first part of the A. O. U. check-list, up to the point at which he began, in two volumes. The present plan, which is subject to revision, is to have the first of the new volumes include the Anatidae at least as far as the geese; but as the life histories of many of the Tubinares will be decidedly brief, it may be well to include all of the Anatidae in this first volume.

The work of gathering information, material and contributions for the life histories has been partially organized on a very satisfactory

basis. As it is impracticable, if not impossible, for any one man to know and keep in touch with all of the competent observers and contributors in North America, it has seemed best to place this work in the hands of competent leaders in various sections, who are tried and willing to take charge of the work in their particular localities, to endeavor to arouse interest among their acquaintances in collecting information, to secure contributions from competent and reliable observers, and to pass judgment on the accuracy and reliability of whatever they send in for publication. The following well-known western ornithologists are among those who have already generously volunteered to serve in this capacity: Mr. Edw. K. Warren for Colorado; Mr. Aretas A. Saunders for Montana; Mr. Allan Brooks for British Columbia; Mr. S. F. Rathbun for Washington; Mr. Wm. L. Finley for Oregon; and Mr. A. B. Howell for California.

Nearly all of these collaborators have reported more or less success in arousing interest in the work among their correspondents, and considerable material has been sent in and filed away for future use; but in far too many cases the results of their labors have been disappointingly small.

Eighteen life histories have already been written, but as they contain mainly the results of the author's personal observations, together with such quotations from published material as seemed desirable to make them more nearly complete, they are open to additional contributions from others, as well as final revision. Preference will always be given to original contributions; quotations from published literature will be reduced to a minimum and contributors will be given full credit for whatever material they furnish.

Mr. Bent already has in his own field-notes nearly enough material to write the life histories of over half of the species to be included in the next volume, but, even after exhausting all the material contained in the published literature on the subject, there are surprisingly few species regarding which we have sufficient material for even fairly complete life histories. An extensive study of the published material brings to light some interesting facts; a vast amount of data has been published on migration and distribution; nesting habits have been written up more fully than any other phase of the subject, and much has been written about the food of birds, particularly from an economic standpoint; but the exact period of incubation and of the development of the young has been carefully worked out for very few species, the sequence of plumages in the water-birds has been sadly neglected, and comparatively little has been published on winter habits.

For many of the water-birds, only the most meagre life histories could be culled from the published literature on the subject. To collate and compile in an extensive work on this subject all that has been published relating to the life histories of North American birds is an undertaking well worth while; but the value of any work of this kind is greatly en-

hanced by a liberal addition of original material, which was a marked feature of Major Bendire's work.

There are few ornithologists who cannot find the time to study effectively some phases of the life histories of one or more species which are readily accessible. There is much information which is badly needed and which could easily be obtained; much information of value lies buried in the field-notes of nearly every observer; even fragmentary notes are often valuable as contributions to life histories; and it is only by collecting as much of this material as possible that we can hope to get anything even approaching completeness.

All possible information is desired on the following points in the life histories of as many species as are available for study: 1. Extent and dates of spring migration. 2. Date of arrival on breeding grounds. 3. Mating performances. 4. Location of nest. 5. Construction of nest. 6. Number of eggs and date of laying. 7. Period of incubation. 8. Do both sexes incubate? 9. Number of broods in a season, with dates. 10. Food and development of young. 11. Sequence of plumages to maturity. 12. Seasonal moults of adults. 13. Food and feeding habits of adults. 14. Flight; swimming or diving habits. 15. Behavior with relation to other species. 16. Vocal powers and their significance. 17. Extent and dates of fall migration. 18. Winter home and habits.

Californians should correspond with our own state representative, Mr. A. B. Howell, Covina, California.

COMMUNICATION

MISINFORMATION

Editor THE CONDOR:

As an instance of crass scientific ignorance I believe that Mr. Wm. D. Boyce, as evidenced in his "Illustrated South America," recently published by Rand, McNally & Co., quite surpasses anything I have seen. He mentions finding in Peru "doves' eggs, which are found deposited in the sand on the banks of the streams. The doves do not 'set' on their eggs, but let the sun hatch them out. The eggs do not have a shell like our birds' eggs, but a tough film like a snake egg." I assure you this is *verbatim*, and written by a man who has travelled extensively and apparently for the purpose of gathering and publishing statistics!

In other places he speaks of the "cow fish" in Peru and of "Potassium iodine" in Chili!

Of course one does not expect all travellers to be infallible; but with so many scientific institutions to refer to it seems an unpardonable carelessness to put on record, in a book supposed to be authentic, such absurdities as the above. It is of but slight use to publish at this late date the correction, and inform the distinguished author that doves do not lay soft-shelled eggs in sand, leaving that to the alligators, turtles and iguanas; or that the "cow fish" is no fish at all but a mammal; or that "Potassium iodine" is as impossible a

compound as "Lime lead", although Potassium iodide is found in Chili! However, you may find space for this, and I trust a copy will find its way into the hands of Mr. Boyce.

Very truly yours,

HENRY B. KAEDING.

February 2, 1913.

MINUTES OF COOPER CLUB MEETINGS

SOUTHERN DIVISION

DECEMBER.—The December meeting of the Southern Division of the Cooper Ornithological Club was held on December 26, 1912, at the Museum of History, Science and Art, Los Angeles, California. On motion duly made and seconded, Mr. Daggett was appointed Temporary Chairman. The following members were present: Messrs. Chambers, Cookman, Daggett, Dickey, Fisher, Hubbs, Lamb, Rich, van Rossem, and Law.

The minutes of the November meeting were read and approved, and the minutes of the Northern Division for December were read. Upon motion by Dr. Rich, seconded by Mr. Lamb and duly carried, the Secretary was instructed to cast the unanimous ballot of those present electing to active membership, Mesdames Eugene Overton, Edwin H. Husler and F. B. Bicknell, and Messrs. W. B. Bell, Frank C. Clark, Alf Eastgate and Joseph A. Sweeney, these names having been proposed at the last meeting.

Applications for membership were presented as follows: Charles S. Moore, P. O. Box 222, San Diego, Calif., proposed by A. M. Ingersoll; M. B. Rice, Cascadia, Oregon, proposed by W. L. Finley; John McB. Robertson, Buena Park, Orange County, Calif., proposed by F. S. Daggett; O. P. Silliman, Castroville, Calif., proposed by W. Lee Chambers. Upon motion by Mr. Lamb, seconded by Dr. Rich and duly carried, the Southern Division accepted with regret the resignation of Mr. E. W. Gifford.

The meeting then proceeded to the nomination of officers for 1913, with the following result: For President, J. E. Law; for Vice-President, Howard Robertson; for Secretary, A. B. Howell.

The Secretary then read a paper by Mr. Virgil W. Owen entitled "Notes on the Nesting of the Heerman Gull off the Southwest Coast of Mexico." Adjourned.—J. E. Law, Secretary.

JANUARY.—The January meeting of the Southern Division of the Cooper Ornithological Club was held on January 30, 1913, at the Museum of History, Science and Art, Los Angeles, California. On motion duly made and seconded, Mr. Daggett was appointed Temporary Chairman. The following mem-

bers were present: Miss Althea Sherman, Messrs. Blain, Chambers, Daggett, Grey, Layne, Miller, Rich, Zahn, and Law, and as a visitor, Mr. W. E. Lewis, of Gate, Oklahoma.

The minutes of the December meeting were read and approved. Upon motion by Dr. Rich, seconded by Mr. Zahn, and duly carried, the Secretary was instructed to cast the unanimous ballot of those present electing to active membership Messrs. Charles S. Moore, M. B. Rice, John McB. Robertson, and O. P. Silliman, proposed at the last meeting.

Applications for membership were presented as follows: E. E. Everett, Ventura, Calif., proposed by J. S. Appleton; Mable C. Gage, Worcester, Mass., proposed by J. Grinnell; Claus Johan Murie, 809 Yeon Bldg., Portland, Oregon, proposed by Stanley G. Jewett; John B. Perrin, Tucson, Arizona, proposed by A. B. Howell; Asa Sleeth, 1025 Michigan Ave., Portland, Oregon, proposed by Stanley G. Jewett.

The Secretary then read the complete report of the Business Managers for the year 1912, showing a decided progress in the financial affairs of the Club. THE CONDOR has become practically self-supporting, and it is hoped that before long the Business Managers will be able to arrange to publish Avifaunas without calling for private subscriptions. Upon motion by Mr. Miller, seconded by Dr. Rich, and duly carried, the report of the Business Managers was accepted.

Upon motion by Mr. Zahn, seconded by Mr. Layne, the Chairman was instructed to cast the unanimous ballot of those present electing for 1913 the officers nominated at the last meeting, as follows: President, J. E. Law; Vice-President, Howard Robertson; Secretary, A. B. Howell. Adjourned.—J. E. Law, Secretary.

NORTHERN DIVISION

JANUARY.—The regular monthly meeting of the Northern Division was held at the Museum of Vertebrate Zoology, Berkeley, Thursday evening, January 16, with vice-president Carriger in the chair. The following members were present: Mrs. H. W. Grinnell, and Messrs. Bryant, Chandler, Carriger, Gee, Grinnell, Heinemann, Loshinski, Shelton, Smith, Storer, and Swarth. Mr. E. P. Rankin was a visitor.

The minutes of the December meeting were read and approved, as also the Southern Division minutes for November and December. Candidates for admission to the Club, proposed at the last meeting, were elected as follows: O. P. Silliman, Castroville, Calif., and M. B. Rice, Cascadia, Oregon. One new name was presented, E. E. Everett, Ventura, California, by J. S. Appleton.

A communication from the secretary of the Pacific Association of Scientific Societies was read, relative to the following points: (1) A request to vote upon the proposed admission of the Puget Sound Section of the American Chemical Society into the Association. (Answered affirmatively.) (2) As to whether the Cooper Club planned to hold a meeting at Berkeley in April, as part of the annual meeting of the Association. (Yes.) (3) A query as to the present membership of the Cooper Club. (4) A notice that the annual dues of the Club were now payable.

In the absence of Mr. Taylor, chairman of the committee on the conservation of wild life, H. C. Bryant gave a short verbal report of the recent activities of the committee.

Owing to the impossibility of the present incumbent continuing to act as secretary of the Northern Division, his name was withdrawn from nomination and the name of Tracy I. Storer substituted. The election of officers for 1913 gave the following results: President, H. W. Carriger; Vice-President, H. C. Bryant; Secretary, T. I. Storer.

Business being disposed of, the remainder of the evening was devoted to a paper by A. C. Chandler, on "Experiences with Tamed Wild Birds". Adjourned.—H. S. SWARTH, Secretary.

FEBRUARY.—The regular monthly meeting of the Northern Division of the Cooper Ornithological Club was held at the Museum of Vertebrate Zoology, Berkeley, California, on February 20, 1913, with President Carriger in the chair. The following members were present: Mrs. Grinnell, Miss Atsatt, Messrs. Bryant, Carriger, Chandler, Grinnell, Shelton, A. G. Smith, Stock, Stone, Storer, and Taylor. Mrs. Taylor, and the Misses Bruckmann, Dodge, and Little were present as visitors. The minutes of the January meeting were read and approved and the minutes of the Southern Division for January were read.

Mr. E. E. Everett of Ventura, California, was elected to membership. The following applications for membership were presented: Mabel C. Gage, Worcester, Mass., and Thomas Trenor, 1501 Scott St., San Francisco, California, proposed by J. Grinnell; Claus Johan Murie, and Asa Sleeth, both of Portland, Oregon, proposed by Stanley G. Jewett, and John B. Perrin, Tucson, Ariz., proposed by A. B. Howell.

Mr. Joseph Grinnell gave a brief summary of the report of the Business Managers of the Club for 1912. The report was heartily approved.

Mr. W. P. Taylor, Chairman of the Committee on the Conservation of Wild Life, then introduced the following resolutions:

Resolved: that the Northern Division of the Cooper Ornithological Club, realizing that California is doomed to become practically birdless and gameless in ten years unless present measures regulating wild life are enforced and added to, does hereby request the members of the California State Legislature of 1913 to pass, without amendment, the Flint-Cary bill to prohibit the sale of wild game, as being a remedial measure which would be in the interest of every citizen of the State of California, and which would be constitutional and effective.

Resolved: that the Northern Division of the Cooper Ornithological Club, realizing the tremendous importance of rigorous protection of non-game birds, does hereby urge that no measure be passed removing protection from any of the non-game birds in any section of the State, particularly the robin, meadowlark, and blackbird.

Mr. Taylor moved that the foregoing resolutions be spread upon the minutes of the meeting and that copies be sent to each member of the Committees on Fish and Game of both houses of the Legislature, and to the Secretary of the Southern Division, accompanied in each case by a letter of transmittal from the Secretary, and that the Southern Division be asked to adopt similar resolutions and to transmit them in a similar manner. The motion was carried.

Mr. Taylor moved that it be declared the sense of the meeting that the urgency of the situation as regards conservation demands that each individual present write letters to his Senator and Assemblyman, strongly urging the passage of the Flint-Cary bill to prohibit the sale of game, and the defeat of all measures designed to remove protection from any of the non-game birds, especially the robin, meadowlark, and blackbird.

Mr. Taylor further reported that a "Western Wild Life Call" was issued on February 7th, and that now practically the whole edition of 15,000 copies has been distributed. Progress along the whole line of game conservation was reported. The State of Oregon has passed a no-sale bill so that California is now surrounded on all sides by no-sale territory.

A vote of thanks was extended to Mr. H. S. Swarth for his services to the club in the position of Secretary of the Northern Division.

Business of the evening being disposed of, Mr. Alfred Shelton read a paper entitled "Woodpecker Notes" the material for which was gathered in Sonoma County during a residence of several years. After discussion of the paper the meeting adjourned.—TRACY I. STORER, Secretary.

CALIF

California has unique claims upon the interest of the world. From Point Barrow to Cape Horn there is no name better known nor mightier to conjure with than that of this golden-haired mistress of the Argonauts who has become the accomplished hostess of the nations. We who live here know best how our shores are thronged continually by seekers of health, sunshine, fortune, romance, and all earthly delights, and how unerring is the return of such as think to shake off the spell once fastened. We sit at the focus of desire, and yet so bountiful and varied are the marvelous resources of our State, that not half has yet been claimed, and the bloom of nature is still unsullied. Nature's story is not trite with us, and we long to share with the widest circle of friends the freshness of our youthful joys. A book on "The Birds of California" is not simply "another bird-book," but *the* book which, outside of one treating of your own State, you will enjoy most of all. And you are coming to California anyway. Of course you are. Everybody worth while is, to visit, or rest, or dream, to retrieve broken fortunes, or recuperate, or luxuriate, or-or *study birds*. *BIRDS!* Why, we have 531 kinds of them—more by over a hundred than any other state in the Union can show. Do you wonder that we are a little self-conscious? or very insistent that we have got a good thing and need help to enjoy it?

Well, anyhow, we believe that a work on "The Birds of California" ought to be supremely beautiful and very satisfying. We are going to do our best, and we want your interest, *your help, YOUR ENTHUSIASM, NOW.*

Success, a success is already assured. We purposely delayed this announcement until that point should be reached, but now that it is reached, we want to act quickly, so as to ensure the very largest success possible. We want to build a larger, brighter, better book than we first promised, and we know that this will be possible if we receive promptly the endorsement we are asking for. Don't wait till the hard work is all done and the other fellows have received all the glory. Help yourself to one of the best editions now and enjoy both the satisfaction of the books themselves and the consciousness of having participated in a public-spirited service. On the next page we are going to tell you how you can do this; but first, we want to remind you:

That the largest success of the proposed work depends upon *cooperation*.

That the realization of our present plans will justify present sacrifice on the part of any subscriber.

That we have conscientiously graduated the expenses of our undertaking so as to allow the financially strong to bear the burdens of the less able. The Patrons are frankly expected to bear a disproportionately heavy share of the "undertaking cost" of the enterprise. If the Patron does not get quite all he is paying for in sheer physical values, the Stockholder and Large Paper subscribers are thereby getting a great deal more than they are asked to pay for.

That there is a place in our endeavor for every sincere bird and book-lover, however humble.

That we are going to achieve, throughout, the best that skill and experience can elaborate from the best materials that money and taste can produce.

That we shall take a far greater pride in delivering to our customers a set of books which fulfil their fondest expectation than we shall in paying cash dividends to our stockholders (who, of course, are in this case the subscribers themselves). And, lastly,

That we will not hurry unduly nor scamp our work at any point. We confidently expect to go to press September 1st, 1915, and to make deliveries in May, 1916; but if for any reason we require more time, we definitely reserve the right to employ another year without reproach or liability.

A SPECIAL OFFER TO MEMBERS OF THE COOPER ORNITHOLOGICAL CLUB

Our enterprise being a purely cooperative one, we have for the sake of convenience in administration organized a stock company under the laws of this State. Our authorized capital is \$75,000, and of this we require \$30,000 to bring our work to press. (The press expenses themselves will stand from \$35,000 to \$75,000 more, according to the number and quality of the books ordered; but this item will be self-insuring). We are offering therefore to subscribers only, 300 shares of our stock of the (original) par value of \$100 each (now \$110), on the basis of one share to each Stockholder subscriber, and five to each Patron subscriber. Of this amount 190, yielding an income of \$19,000, has already been sold, and the current price to the public has risen to \$110 per share. But we offer hereby the remainder of 110 shares to members of the Cooper Ornithological Club only, for a limited time or until sold out, *at par*, payable in four annual instalments of \$25 each.

The stock so subscribed for yields dividends payable in books. That is to say, if you subscribe for one share of stock, paying \$25 down, and \$25 the first day of each January thereafter until the sum of \$100 has been paid, you will receive as a *guaranteed dividend* a set of the Stockholders' Edition of "The Birds of California"—a set which, if paid for on

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sold, and the following members of the Cooper Ornithological Club are among the present subscribers:

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CHARACTER AND CLAIMS

For those not already acquainted with Mr. Dawson's work we submit a few extracts from reviews and letters which appear to justify our high expectations of this final effort. Of *"The Birds of Ohio"* (1903).

"The most attractive and valuable work on the birds of a single State which has yet appeared".

—Frank M. Chapman

Of *"The Birds of Washington"* (Two volumes, 1909).

"The work as a whole and in detail is a model of its kind".

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—Joseph Grinnell in *The Condor*

"I am delighted with them".

—Theodore Roosevelt

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THE ENTERPRISE

In November, 1910, in response to an invitation tendered by several prominent members of the Cooper Ornithological Club, William Leon Dawson, the senior author of "The Birds of Washington," came south to look over the field, and, if favorably impressed, to propose plans for the preparation of a splendid and elaborate work upon "The Birds of California." His plans were submitted to both divisions of the Club and enthusiastically ratified; and the members of the Club pledged themselves to co-operate by every means in their power toward the success of the enterprise. A quiet personal canvass of support was at once begun, and the results obtained justified the organization of "The Birds of California Publishing Company" the following spring, viz., in April, 1911, with an authorized capitalization of \$75,000. The canvass has so far progressed that the value of book subscriptions in hand already exceeds the working capital required, viz., \$30,000; so that we are ready to make our plans public and to invite final action.

The scope of the proposed work is virtually that of the Washington book, save that it is to be rather fuller in textual treatment and very much more elaborately illustrated. Each species of bird found in California will be portrayed in an extended popular vein, and each subspecies will receive separate technical treatment. The text itself will be entirely the work of Mr. Dawson, but it will incorporate not only his own experience of five or six years in California, but the essentials of all available knowledge as published in "THE CONDOR" and elsewhere, and as embodied in abundant notes contributed by members of the Cooper Club. The work is thus seriously undertaken, as advertised, "under the auspices of the Cooper Ornithological Club," and Mr. Joseph Grinnell has promised to vise the manuscript.

Especially pains is to be taken with the illustration of "The Birds of California"; in fact, it is to be for its size the most elaborately-illustrated work on birds ever undertaken, as well as the most sumptuous ever produced in America. As a basis of this expectation, we have the uninterrupted work of the author and his assistants with the cameras for five seasons in California (Photographs of twenty-five species of the *Limicolae* have already been secured). Messrs. Bohlman and Finley of Portland have promised to supply needed material from their matchless collections, and a host of amateurs are already at work to the same end. Finally, and best of all, Mr. Allan Brooks, who is now in California, is devoting practically his entire time for five years to the production of the colored plates for "The Birds of California." In this as in other regards our realization is exceeding our original promises. We began by promising only 48 plates, whereas we already have over 100, and hope to have 200 or even 300—all without additional cost to our original subscribers.

THE EDITIONS

Patrons' Edition, De Grand Luxe, complete in four sumptuous volumes and limited to one hundred copies. A hand-made edition of extreme luxury, illustrated throughout with original photographs, half-tone proofs pasted in, bromide enlargements, etc., and containing six original water-color studies by Allan Brooks. This edition will employ a large format, 11½ by 15 inches, facilitating the use of hand-set type and the display of over 1000 illustrations. The binding will be of the best known to the art, and will be done (tariff conditions permitting) in London under personal direction of Mr. Dawson. The set will weigh fifty pounds. The price is \$1000. Seventeen sets already subscribed, as follows:

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delivery, would cost you \$150. (Many sets are in fact so contracted for). Besides this, you will retain your interest in the Company, and participate in future cash dividends, if such dividends there be.

In like manner, a set of the Sunset Edition De Luxe (regular pay-on-delivery price \$110), may be engaged upon advance payment of \$80, of which \$20 down and \$20 January 1st each year till paid in full. You will receive a certificate for a three-quarter share of stock in The Birds of California Publishing Company, and a guarantee of the set of books as a dividend.

A set of the Large Paper Edition De Luxe goes for an advance payment of \$50 (\$12.50 down and \$12.50 per annum till paid) and carries a half share of stock, with guarantee.

Finally, a set of the Booklovers' Edition may be secured by advance payment of \$35 of which \$8.75 down and like payment for three succeeding Januaries, with issue of a one-third share of stock.

These plans all represent a substantial saving of money, and their previous use has already guaranteed the success of the undertaking. Moreover, the life of our author is fully insured in favor of our stockholders to a point above the actual paid-in risk, and will be so insured until such time as his manuscript and photos are completed, ready for press. There is thus no known possibility of loss.

Thirty-nine of the Cooper Club members whose names appear above have so subscribed, and are paying for their stock on the instalment plan. Our present offer to the remaining members is still more liberal in view of the now assured results. The days of uncertainty have passed.

We do not say much about cash dividends. There ought to be a good chance of such returns, for we mean to put the popular edition on a permanent basis. But we are not asking for your money in order that we may return it in cash dividends. We are asking you to invest in books, and we are undertaking, guaranteeing, to give you books from 30 to 50 per cent better than you pay for, because you pay for them now.

Or if you are "afraid of a stock proposition," you may engage the books upon precisely the same terms of payment, and the secretary of our company will carry the stock as a personal risk; that is, you will be asked to accept his personal receipt and guarantees for moneys received instead of ours. He will own the stock and you will get the books. Our Patrons, following the lead of Mr. Crocker, preferred to do this, and are now required so to do. You are welcome to either arrangement, but we think you are missing a good thing if you "pass up" our stock.

To recapitulate: Any member of the Cooper Ornithological Club may obtain a copy of the Stockholders' Edition for \$100 (payable in four payments of \$25 each), or a Sunset Edition for \$80 (four payments of \$20 each), or a Large Paper for \$50 (four payments of \$12.50 each), or a Booklovers' for \$35 (four payments of \$8.75 each), with or without issue of stock.

Subscriptions will be filed promptly in the order received. This offer is good till June 1st, 1913 only, and will automatically expire before that date whenever the remainder of the 110 shares is exhausted. No more copies of any edition will be sold thereafter at less than full price.

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For Sale, Exchange and Want Column.—In this space members of the Cooper Club are allowed one notice in each issue free of charge. Books and magazines can be offered for sale or exchange; bird skins and eggs can be offered in exchange, but *not for sale*. Notices must be written plainly, on one side only of a clean sheet of paper. For this department address W. LEE CHAMBERS, *Eagle Rock, Los Angeles County, California*.

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NOTICE.—For Mr. Bent's continuation of Capt. Bendire's "Life Histories of North American Birds", nesting photos, and the loan of downy young and specimens in juvenal plumage of most of the following species are needed: A. O. U. nos. 4-5-16-25-26-29-30a-49-57-66-74-93-93.1-103-106.1-107-108-108.1-113-114.1-115.1-120c-122-123b-128-132-141-142-143-167-178. What is needed most of all is the cooperation of every ornithologist in the state. Send in all unpublished notes of interest regarding the above birds and you will get full credit for all you contribute. In order to have California well covered it is necessary for each one to do his share, for the state is a big one. Address A. B. HOWELL, *Covina, Calif.*

FOR EXCHANGE.—Desirable skins of Florida and Eastern species; 575a, 549, 550 and many others. Want 546a, 547a, 550a, and others. Please send list of duplicates to spare in exchange for my list. C. W. CHAMBERLAIN, *36 Lincoln St., Boston, Mass.*

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